FOR THE COIN-OP ENTERTAINMENT INDUSTRY ..... PUBLISHED TWICE MONTHLY

PLAY METER

MARCH 15, 1986

1986 Spring Buyers Guide

Another Winner From memetron

MAT MANIA

T.M.

Pro Wrestling action that 'pins down' profits!

The ultimate challenge!

A match of wits and skill with classic ring techniques used in today's popular professional wrestling arenas.

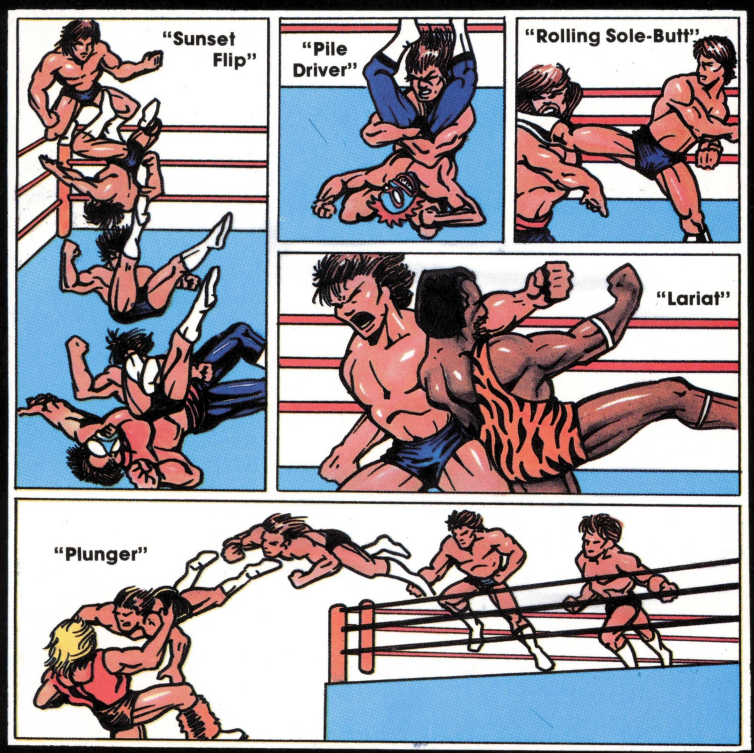
Events are introduced by the ring side announcer to signal the start of the match. The player battles each of his 5 awesome opponents in quest of the championship.

Timely use of joystick and buttons maneuvers the player into position and activates all the standard as well as spectacular moves including Pile Driver, Sunset Flip, Rolling Sole Butt, Lariat, Plunger, Flying Body Press -- everything to weaken the enemy for a pin-fall win for the count of 3, or keeping the challenger out of the ring for a 20 count.

After each win, the player takes on the next opponent for another three minute period. If he defeats all of the opponents he earns the right to the Championship Belt and goes on to the next tour in defense of his title.

Colorful, fast-paced action plus realistic sound effects of hits, moves, count-down and crowd cheers adds to the atmosphere and excitement associated with the current rage of professional wrestling.

Enjoy a money-making ring-side seat with this sure winner — the **MatMania** King Kit® conversion.



© Copyright 1985 Taito America Corp. Licensed by Technos, Japan.
Exclusive North American rights by Memetron, Inc.

memetron INC.
2350 Brickvale Drive
Elk Grove Village, IL 60007
Phone: (312) 595-2828
Telex: 210227 Ansb. Memory

BEST KIT OF THE 1985 A.M.O.A. SHOW!

PLAY METER

Twice a Month Publication for the Coin Operated Entertainment Industry

Member

CONTENTS/ Volume 12, Number 4/March 15, 1986

FEATURES

Video-game industry still evolving 12

From its beginning 14 years ago with the introduction of **Pong**, the video-game industry has been marked by ups and downs that leave manufacturers continually trying to adjust to new conditions.

Spring Buyers Guide 17

This comprehensive listing of pinballs and video games (including kits and systems) will prove an indispensable reference for buyers of new and used equipment. The guide includes photographs and manufacturers' addresses and telephone numbers.

Strong visuals always part of successful pins . . . 56

In recent hits of the pinball revival, like **Rock** and **High Speed**, Roger Sharpe sees evidence that artwork again has taken a leading role in the creation of successful games.

IMA show boasts little new 74

West Germany's IMA show, another to reflect an international upswing in the coin-op industry, attracted many visitors who were treated to few surprises. In a nation in which games with "violent" themes are voluntarily banned, the show offered few new games.

DEPARTMENTS

5 Up Front
6 News
72 Equipment Poll
77 Frank's Cranks
78 Management
80 Record Charts
83 Tax Tips
85 Aids to the Trade
87 Classified Advertising

Cover: Designed by Margret Vincent.

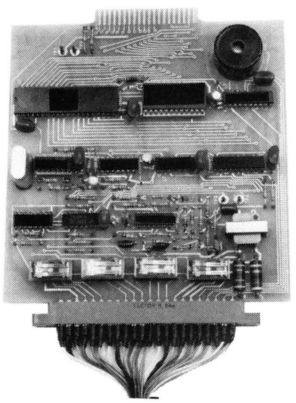
KIDS LOVE OUR EGGS

YOU WILL TOO!

Dispensing our popular and exciting toy-filled egg capsules is fun and profitable. Contact us for equipment and supplies.
Toll-Free 1-800-EGG SHOP

INNOVATIVE INDUSTRIES, INCORPORATED
2605 Grand Ave. • Carthage, MO 65836

$$++ The DOUBLE PLAY ++$$



- **Increases revenue by allowing two games to operate in single cabinet.**
- **Legally double your game capacity for those cabinet limited stops.**
- **New conversion? Don't shelve that old game. Use both.**
- **Field proven.**
- **Uses existing controls and monitor. Easy to install**
- **Alternately displays Attract Mode of both games.**
- **No gimmick. The DOUBLE PLAY board is an intelligent microprocessor controller.**
- **Allows Nintendo VS. UniSystem to operate with both games (must specify).**
- **Cabinet Art Kit available for that Professional Look. (Includes marquee, instruction sticker, and game identifiers.)**
- **Repair warranty.**

- **$169.95 (board and harness)**

DP ELECTRONICS
16 North 3rd St. • Harrison, NJ 07029
Tel: 201/484-0235

We Accept: VISA • MasterCard • Checks • Money Orders • C.O.D.
Add $4.00 for shipping & handling
C.O.D. — Add $4.00

Call (504) 488-7003 to renew your Play Meter subscription.

STAFF

FOUNDER:
Ralph C. Lally II

PUBLISHER:
Carol P. Lally

V.P. AND COMPTROLLER:
John F. Lally III

V.P. AND DIRECTOR OF ADVERTISING:
J.A. VonderHaar

EDITOR:
George R. Sigler

EDITORIAL DIRECTOR:
Valerie Cognevich

ART DIRECTOR:
Katey Schwark

TYPOGRAPHER:
Jo Ann Anthony

GRAPHICS DESIGNER:
Margret Vincent

CONTRIBUTING EDITOR:
Bonnie Theard

TECHNICAL WRITER:
Frank Seninsky

CORRESPONDENTS:
Roger C. Sharpe
Charles C. Ross
Mike Shaw
Dick Welu
Richard Priesmeyer
Irving L. Blackman
Harold I. Gould
Jeffrey Rosenthal

CIRCULATION MANAGER:
Renee' C. Pierson

ACCOUNTING:
Lenore R. Bramblett

COUNSEL:
Rufus King

PLAY METER, March 15, 1986. Volume 12, No. 4. Copyright 1986 by Skybird Publishing Company. **Play Meter** (ISSN 0162-1343)(USPS 358-305) is published twice monthly on the 1st and 15th of the month, except February, when it is issued once. Publishing office: 6600 Fleur de Lis, New Orleans, LA 70124; **Mailing address:** P.O. Box 24170, New Orleans, LA 70184, U.S.A.; phone: 504/488-7003. For subscriptions: 504/488-7003. Subscription rates: U.S. and Canada—$50. Advertising rates are available on request. **No part of this magazine may be reproduced without express permission.** The editors are not responsible for unsolicited manuscripts. **Play Meter** buys **all rights**, unless otherwise specified, to accepted manuscripts, cartoons, art work, and photographs. Second-class postage paid at New Orleans, LA 70113 and additional mailing offices. **Postmaster:** Send Form 3579 to PLAY METER, P.O. Box 24170, New Orleans, LA 70184.

U.S. manufacturers playing catch up

Back in the late '50s and early '60s Japanese automobile manufacturers began exporting to the U.S. small cars that didn't use much gas. Americans looked them over and laughed. They compared them to the chrome giants they were driving, and because gasoline was so cheap almost no one gave them a second thought.

Americans continued their love affair with chrome and luxury and bought cars on the theory that the bigger, the better. Meantime, the Japanese kept improving their little cars that were gas conservative.

Then a funny thing happened. Arab producers embargoed oil in 1973, and gasoline prices skyrocketed. Lines formed at gas stations, and newspaper classified pages became filled with ads for used gas guzzlers that Americans had loved so dearly.

Those economical Japanese cars suddenly were in great demand. Gas mileage was promoted as a special feature as luxuries had once been. Thirty miles to a gallon of precious gas was all that counted, and the Japanese were the only ones who offered what car-buying Americans wanted. American manufacturers rushed into production of small cars, but they couldn't match the quality and reliability of the Japanese cars.

Manufacturers beseiged the public to "buy American," but there was little American at the time to fit the needs of car buyers. American customers weren't being disloyal to American companies, it was the manufacturers who had failed their customers.

In the '70s a Japanese manufacturer of video games licensed a little game to a big American company. The game was called *Space Invaders*, and the rest of the story is well known in the coin-op amusement industry. Video games took off in popularity from this game, and soon everyone had a space-themed game to offer a video-game-crazy market.

In the early '80s a Japanese company licensed another video game to the big American company, and, presto, it was a hit—though, to be fair, not an instant hit. Space games were dominating the market, and there were doubts that a cutesy game could be successful. The game, of course, was *Pac-Man*, and it wasn't long before everyone had a cutesy game.

Someone said he couldn't believe that the Japanese were so much smarter than Americans. "I think the Americans are just waiting for someone else to do the work," he said. And looking at the video games in America today, dominated by Japanese product and companies, it certainly looks like the Japanese are smarter. And Americans are waiting for them to do the work.

But—

I don't believe for a minute that the Japanese are that much smarter than Americans, even if about every video game on the market is Japanese-developed. American know-how and creativity is here, finally showing itself in the automobile industry, and I think it will show itself in American manufacturing of amusement games. Pinball is an American-dominated game, and American engineers have developed some good pinballs. Jukeboxes, pool tables, electronic darts, and other kinds of equipment are primarily American products. Maybe Americans just realize where they are strong and where they are not. Nevertheless, Cinematronics, Atari (ironically named after a move in a Japanese game), Bally Sente (likewise), Premier, Bally Midway, Williams, and some new companies on the horizon, like Grand Products, have American engineers developing American games.

They are not waiting for someone else to do the work.

Valerie Cognevich

Valerie Cognevich
Editorial Director

NEWS

AMOA tournament applications due April 1

Applications from operators are due April 1 for the first AMOA national tournament, according to Kirk McKennon of Custom Events International, the tournament coordinator.

A limit of 256 teams has been set for the tournament, which is scheduled for May 2-4 at the Ramada Inn O-Hare in Chicago. AMOA is urging all operators to reserve a minimum of three teams.

Applications are available from AMOA. For more information, call McKennon toll-free at 1-800-447-DART. •

PAMMA urges video-poker legalization

Following a February 13 police raid in which video-gambling games were seized from restaurants and taverns in Dauphin County, Pa., the Pennsylvania Amusement and Music Machine Association (PAMMA) urged its members to support a proposed state law that would legalize video-poker games.

According to a *Harrisburg Patriot* newspaper article sent by PAMMA to its members, 120 machines were seized from 86 locations in the raid. Video-poker machines are classified as gambling devices under Pennsylvania law, and, although no arrests were made during the raid, police said owners of the machines could be prosecuted under the state's Corrupt Organization Act.

State and city police involved in the raid sought to determine whether payoffs were being made on the machines and, if so, what the payoff methods were. Police said information gathered would be turned over to county District Attorney Richard A. Lewis.

Lewis said that last year all licensed establishments in the county were asked to get rid of the video-poker machines voluntarily. "At that time," he said, "it was stressed that there would be no arrests. There might have been some initial compliance, but it certainly wasn't overwhelming compliance." •

Illinois lottery players to use video terminals

Illinois lottery players this summer will begin stepping up to special video terminals, inserting their money, and touching spots on a video screen to select their games and numbers. The purpose of the "player-activated machines," said Illinois Lottery Superintendant Rebecca Paul, is to make it more convenient to play the *Lotto*, *Daily Game*, *Pick Four*, and instant games.

These machines eliminate the need for an attendant to operate a terminal connected to the lottery's main computer in Springfield. About 500 player-activated machines will be

AMUSEMENT AND MUSIC OPERATORS ASSOCIATION
presents
$25,000*
*Based on 250 total entries
1ST AMOA NATIONAL TEAM DART TOURNAMENT
$12,500* OPEN
*Based on 125 entries
Any four persons per team
$10,000 payback guaranteed
$12,500* WOMENS
*Based on 125 entries
Four women per team
$5,000 payback guaranteed
DATE: MAY 2-4, 1986
Entry Deadline: April 1, 1986
PLACE: RAMADA O'HARE
Chicago (Rosemont), Illinois
PHONE: (312) 644-6610
For tournament application information
GAME: 301 ANY IN-ANY OUT
Double Elimination
ENTRY FEE: $100 per TEAM
TROPHIES: INDIVIDUAL and TEAM: 1ST-8TH PLACE
TEAM: 9TH-24TH PLACE
AMOA MEMBER LEAGUE TEAMS ONLY
100% of entry fees will be awarded as prize money to the top 50% of teams entered
OFFICIAL TOURNAMENT MACHINES:
Bull Buster Darts
idea
ALL-AMERICAN DARTS
NOMAC LTD.
PUB TIME DARTS
Copyright 1986 AMOA 111 East Wacker Drive, Suite 600, Chicago, Illinois 60601

hooked to the main computer by July 1.

Ohio uses the machines in its lottery, and an Ohio Lottery spokesman said, "It's the titillation of technology that attracts the public's curiosity to the machines."

Illinois was the site of a nine-month video-lottery test sponsored by Bally Manufacturing, whose subsidiary, Scientific Games, makes lottery equipment for other states. That test ended a dismal failure. Free-lance writer Tom Lucas, in an article about the video lottery, wrote that the video-game format probably was only a forerunner of automatic lottery machines. He says of the new machines, "Doors are open for the use of the video-game amusement characters as attractions to the 'new' video-lottery machines, although whether this proves to be desirable for the lottery is unclear."

Amusement operators have opposed the use of video-game themes for lottery machines because of image problems that may result from associating the coin-op industry with gambling.

According to the Chicago *Sun Times*, in 1975 the lottery brought $58,000 into the Illinois treasury on sales of $129,000. This year, the profit is expected to be $580 million on sales of $1.3 billion. *Lotto* began as a $1 million once-a-week game and now is a $3 million game twice a week. •

AMOA criticizes medical association's proposal

In a letter to its members, the Amusement and Music Operators Association (AMOA) has criticized the American Medical Association's (AMA) recommendation that cigarette advertising and the sale of cigarettes through vending machines be banned. Noting that the AMA intends to have legislation introduced at state and national levels to reach its objectives, the AMOA said the proposed ban's effect on vendors would be dramatic.

"It's unfair and naive," said John Estridge, the AMOA's immediate past president. "It would cause financial grief to people who own and supply cigarette-vending machines."

The AMOA attached a copy of an action plan implemented by the National Coin Machine Institute (NCMI) and urged its members to follow the plan. The AMOA cited the NCMI's telegram sent to the American Medical Association. It read:

"In singling out cigarette-vending machines in the cigarette-distribution chain as the only target for the outright ban, delegates ignore the other 90 percent of retail sales. The delegates were seemingly ignorant of the fact that 95 percent of our cigarette machines are in highly regulated establishments that serve alcoholic beverages or are regulated in highly supervised factory and work locations.

"While clearly unfair and discriminating, AMA's action is also unconstitutional in seeking to prevent the sale of a product that is legally manufactured. The 75,000 employees of the 6,500 small business operations who place and service cigarette-vending machines urge you to reconsider your unfair actions in combating the problem you perceive."

The AMA stated in its resolution that "there are 3.3 million teenage smokers 12 to 18 years old, representing 12 percent of that age group, and a significant number of children under the legal age to purchase cigarettes do so through vending machines."

The NCMI refuted the statement, saying, "Our prices are generally higher than supermarkets, and children are well versed in saving money; 95 percent of our locations are where children are not present; the other five percent of the machines have minimum sales, and it is our feeling that children will not purchase their cigarettes there; and in a research project in relation to the purchase of cigarettes it was determined that the majority of children get cigarettes from parents, friends, or retail outlets. By far, the smallest percentage came out of vending machines."

Roger Mozingo of the Tobacco Institute in Washington said 10 percent of all cigarettes are purchased through vending machines.

The latest action by the AMA, he said, should make those involved in vending more actively oppose proposed legislation or regulations to ban smoking.

The NCMI has urged operators to get involved politically to prevent the proposed legislation. The institute will furnish a list of doctors who attended the convention to operators who wish to discuss the proposal with doctors in their area. •

Tonk-A-Phone fights trademark ruling

Tonk-A-Phone, a Minnesota com-

THE CALENDAR

April 11-13
New York State Coin Machine Association Trade Show, Turf Inn, Albany, New York. Contact Gina Vichiconti or Curtiss Matterson, NYSCMA Headquarters, c/o Matterson Associates, 427 Kenwood Ave., Delmar, NY 12054, telephone (518) 439-0981.

April 18-19
Washington Amusement & Music Operators Association (WAMOA) Annual Pacific Northwest Exposition, Red Lion Inn, Bellevue, Washington. Contact Steve Livingston at (509)326-6053 or Jim Hart at (509) 457-5891.

April 26
Amusement and Music Operators of Texas (AMOT) 6th Annual Texas State Eight Ball Pool Tournament, Texas Stadium, Irving, Texas. Contact Pat Miller, (512) 454-8625. Direct all inquiries to 940 E. 51st St., Austin, TX 78751.

May 13-14
RSROA (Roller Skating Rink Operator's Association) Trade Show, Terrazo Room/Exhibit Hall, Disneyland Hotel, 1150 West Cerritos Avenue, Anaheim, CA 92802. Contact Pamela Myhre or Patty Shorney, RSROA, P.O. Box 81846, Lincoln, NE 68501 or call (402) 489-8811.

May 16-18
Wisconsin Amusement & Music Operators Annual Convention and Trade Show, Embassy Suites, Green Bay. Contact WAMO at (414) 529-4704.

May 29-June 1
Florida Amusement/Vending Association (FAVA) Convention Trade Show. Hyatt Orlando, Kissimmee, Florida. Contact Norm Jensen at (904) 878-3134.

International Shows

April 14-23
Milan Fair, Fiera Campionaria Internazionale di Milano, Milan. Contact E.A. Fiera Milano, Largo Domodossala 1, 1 20415 Milano, Italy. Telephone 49 971. Telex 331360.

April 24-16
SADA '86, Barcelona, Spain. Contact Interalia SA, Diagonal 474, Barcelona 6, Spain. Telephone 93-218-58-50.

pany that was much involved in the fight to deregulate the pay-phone industry and was one of the first to sell private pay phones, has been found by a federal court to have infringed the trademark of another Minnesota company, Tonka Toys. The toy manufacturer filed suit in 1984 claiming trademark infringement.

Pending an appeal of the ruling, which would entitled Tonka Toys to Tonk-A-Phone's profits of last year, estimated at $250,000, and renumeration of legal expenses, Tonk-A-Phone has changed its name to T.A. Phones.

According to T.A. Phones' Bob Albertson, Tonka is the name of a Minnesota town, and 117 companies use the name. "We have been in business since 1977," Albertson said, "with our building near Tonka Toys. We both belonged to the West Tonka Chamber of Commerce, so we saw each other at meetings and other public activities. I think that is why I didn't take the suit too seriously. I also didn't think a judge would rule a monopoly on the name of a town and one that 117 other companies were using in their business name."

Albertson said Tonka Toys, awaiting the outcome of its suit against the phone manufacturer, has filed no lawsuits against any of the other companies also using the Tonka name.

His company has held a federal trademark for automative and chemical products, Albertson said, and Tonka Toys holds the Tonka trademark for toys and children's clothes. Other companies, he said, also hold federal trademarks on the name, and among them they deal in paper products, pumps, coolers, toasters, camping supplies, boats, cars, transmissions, and liquor.

In addition to appealing the ruling, Albertson said he has enlisted other Tonka trademark holders to file a class-action suit against Tonka Toys.

In any event, Albertson said, "We are still in business and will stay in business." •

Court grants Dublin licenses

A Dublin circuit court has ruled that 33 of the city's 76 amusement arcades may receive licenses for another year despite a city council decision that in effect would have forced all the city's arcades to close within a year. (See "Irish arcades dealt crushing blow" in the March 1, 1986, *Play Meter*.)

The arcades were reprieved because they had applied for new licenses before the city council's decision to rescind the Gaming and Lotteries Act under which it issued the licenses. •

Group forms Mass. distributor

Rick Kirby, a former Bally Distributing employee, will open a distributing office, New England Coin Op, in Norwood, Mass. Kirby and investors including Betson Enterprises, David Tucker, Richard Donlin, and Bob Donneley are looking for facilities suitable for the office. Kirby said the company will in effect be a subsidiary of the Betson network and will represent the lines carried by Betson.

Formation of New England Coin Op followed an announcement by Bally that by March 31 all its distributing offices would be sold or closed. "There are 13 other employees from the Bally Northeast office who will be joining New England Coin Op," Kirby said. Though Bally announced sales of several of its offices, including those in Chicago, Philadelphia, and Maryland, there had been no announcement as to the fate of the Bally Northeast office in Norwood. •

Universal drops video-game business

Universal U.S.A. of Santa Clara, Calif., has announced it is out of the video-game business.

The company is noted for its video conversion kit called *Mr. Do!*, which has been hailed as the most successful kit ever. When the kit was introduced in 1982, the kit concept was new, and the prevailing opinion was that only mediocre games would ever be introduced as kits. Opinions changed after the tremendous success of *Mr.Do!*

The company followed with *Mr. Do!'s Wild Ride, Mr.Do!'s Castle*, and several unrelated kits. Universal combined its video-game and slot-machine operations a year ago and now will concentrate strictly on its slot-machine business. •

Premier changes drop targets

Pinball manufacturer Premier Technology has announced that the

drop targets in all its future games and in parts orders will be made of a new, more elastic material.

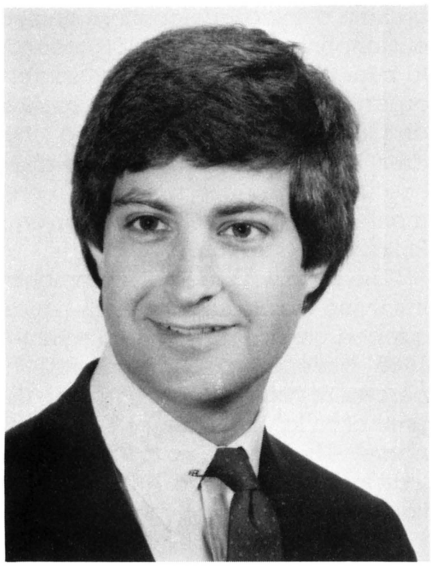
According to the company, formed a year and a half ago with assets of the defunct Gottlieb/Mylstar, the new targets have been operator/location tested for 15 weeks, and not one has broken. •

Pay-phone conference planned

The National Payphone Association (NPA) Annual Conference and Trade Show is scheduled for June 9-11 in Las Vegas.

Co-sponsored by the NPA and Telestrategies, Inc., the show will include exhibits by pay-phone manufacturers, distributors, and vendors and feature conferences on a variety of topics involving technology, regulation, and operation of pay phones.

For more information, write Telestrategies, 1355 Beverly Road, McLean, VA 22101, or call (703) 734-7050. •



John Margold

Margold joins Cinematronics

Cinematronics has named John Margold vice president of sales. Margold has more than 10 years of experience in the coin-op amusement business, eight of those in distributing. He previously was with Bally Manufacturing and Bally Distributing.

Margold recently moved from Philadelphia to Chicago to head up Bally Midwest, which subsequently was bought by American Vending Sales after Bally decided to discontinue its distributing operations. With Cinematronics, Margold will remain in Chicago. Ken Anderson continues as the company's West Coast representative. •

New Orleans Novelty co-founder dies

Raymond D. Bosworth, co-founder of New Orleans Novelty with partner Louis Boasberg, died recently in New Orleans.

Boasberg and Bosworth, nicknamed B&B by friends, met in 1927 when they attended high school together. As sophomores at rival universities in New Orleans (Bosworth at Loyola and Boasberg at Tulane) the two put some used games on location. By the time they graduated they had built up an extensive operation.

They named their operating company New Orleans Novelty in 1932, and the company remains successful today with Boasberg at its head.

"We started out operating penny counter machines," Boasberg said. "Our first pinball purchase was Gottlieb's *Big Broadcast*. The rest is coin-machine history."

Bosworth, who sold his interest in the company years ago, is survived by his wife Jane and three daughters. His daughter Shiela Bosworth wrote the best-selling novel *Almost Innocent*. •

Vendo/USI appoints World Wide

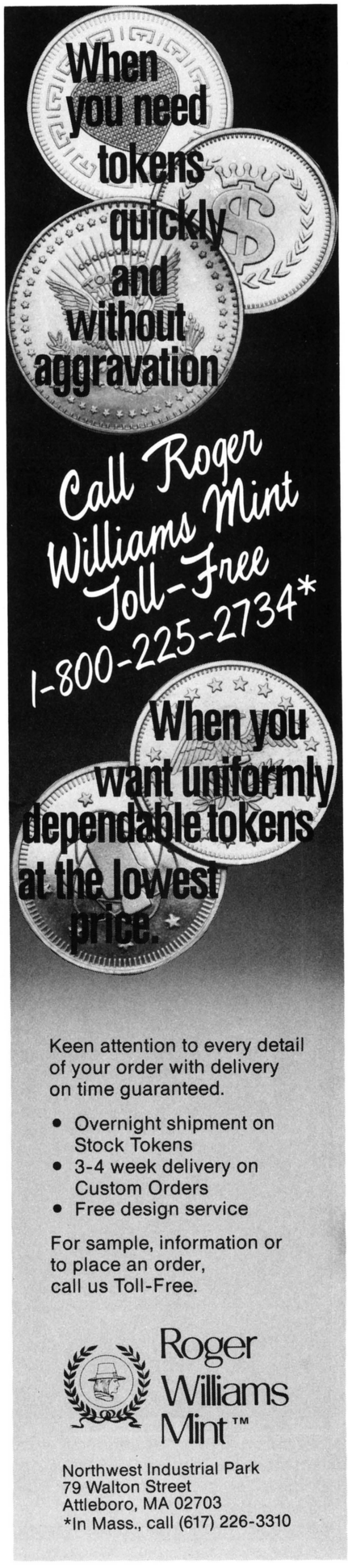
World Wide Distributing, an independently owned, family-operated distributorship in Chicago, has been appointed by Vendo/USI as its exclusive distributor in Illinois.

Fred Skor, who recently bought the 43-year-old company, said he hopes to strengthen World Wide's position in the vending market by selling Vendo/USI equipment. •

Morici joins Capcom

Joe Morici, for the past two years sales manager for Bally Advance in San Francisco, has joined Capcom as western regional sales manager.

Morici began his career in the coin-op amusement industry with the distribution concern of Universal USA. •


When you need tokens quickly and without aggravation
Call Roger Williams Mint Toll-Free 1-800-225-2734*
When you want uniformly dependable tokens at the lowest price.
Keen attention to every detail of your order with delivery on time guaranteed.
• Overnight shipment on Stock Tokens
• 3-4 week delivery on Custom Orders
• Free design service
For sample, information or to place an order, call us Toll-Free.
Roger Williams Mint™
Northwest Industrial Park
79 Walton Street
Attleboro, MA 02703
*In Mass., call (617) 226-3310

Great Priazzo Shootout benefits handicapped children

Poster child Sean Dennsteadt happily accepts a Nintendo home-game system from Nintendo's Bill Cravens (right) as Sharon Harris and her father, Stan Harris, look on.

More than 140 people attended the Great Priazzo Shootout at the Dunfey City Line Hotel in Philadelphia January 19. Participants' names were drawn every week from Pizza Hut locations. The two top winners on Nintendo's Hogan's Alley, *Luigi Santoro, Jr., and Bob Tillman, received trips to Epcot Center in Disneyworld. Variety Club's poster child, Sean Dennsteadt, drew from all the entries for the winner of a third trip, John Sargent.*

Take an operator with a good idea to promote the industry and help a worthwhile charity, add determination and perseverance, and mix with cooperation from a major manufacturer, and you have the formula for a successful promotion.

These forces came together early this year to produce an extraordinary promotion despite setbacks that might have kept it from getting off the ground.

Sharon Harris of Stan Harris Company in Philadelphia was the operator; Nintendo of Seattle, the manufacturer; Variety Clubs, the charity; and The Great Priazzo Shootout, the event.

Harris' company is the operator for a chain of Pizza Hut locations singled out to sponsor the event, with proceeds to benefit Variety Clubs, a charitable organization that provides recreation and therapy for handicapped children. Each year, television game-show host Monty Hall is master of ceremonies of a Variety Club telethon on a Philadelphia station.

The operator's idea of a promotion involving Pizza Hut to benefit handicapped children evolved in summer 1985. Nintendo offered to donate 10 percent of gross collections during the promotion to Variety Clubs. The catchy name—The Great Priazzo Shootout—was inspired by Pizza Hut's introduction of its new Priazzo pie.

After Harris and the Nintendo staff planned the promotion during several days in Seattle, all that was left was to make a formal presentation to Pizza Hut's management. After approval and suggestions, the promotion was scheduled. Then the Pizza Hut account executive involved died. It was only the first of several setbacks.

Plans called for a four-week promotion that would include a weekly contest in each store using Nintendo's *Hogan's Alley*. Plans were made and games were shipped when another obstacle presented itself. Pennsylvania law prohibited contests in any location with a liquor license. Because most

Pizza Huts serve beer, it was a major problem. A new law permitting tournaments was stalled in the state legislature, and there was no guarantee it would pass in time for the promotion.

Pizza Hut executives became hesitant about being involved, but, Harris said, "we at Stan Harris and Nintendo were not about to give up that easily."

Harris finally received dispensation from the Pennsylvania Liquor Control Board allowing the restaurants to serve as drop-off points for the sign-up forms but not as locations for weekly contests. Harris had to modify plans already implemented. The daily certificates and prizes were already out, and the rules had to be rewritten in precise legal terminology. "We spent seven hours one day in a Center City law firm's conference room, which should have been enough to legalize anything," Harris quipped.

With locations no longer allowed to hold weekly contests, each store manager simply picked a name from the completed forms and sent it to Harris. After the four-week period there were 135 contestants invited to attend the January final Shootout. "We could only hope that the location games would be a practice range for the contestants and their friends," Harris said.

"We were back in the game," Harris continued. "Nintendo printed beautiful table-top tents, and our company made plans to deliver the games to the stores, but even that was not to run smoothly. The air-freight company delayed the arrival of the printed materials, and we ended up having only two days to deliver it to 47 stores."

After clearing that hurdle, another was waiting. The Marriott Hotel, the scheduled location of the Shootout, was sold to the Omni/Dunfey Hotel chain. "As our luck would have it," Harris said, "the name was changed to the Dunfey City Line Hotel, so the typesetting had to be redone."

But even that finally worked out, red tape was cut more than once, and on January 19 the Shootout took place. During the Variety Club Telethon, Bill Cravens of Nintendo, Harris, and Jim Herpy, district manager of Pizza Hut, handed Monty Hall a check for $2,500.

If you ask Harris if it was worth it, she doesn't hesitate to exclaim, "Yes! If we had only been interested in donating money, we could have written a check instead."

She added that an important purpose of the promotion was to make video games visable as a profit center, noting that video games too often are the first things dropped from locations to add something else. "When you operate in a chain of locations, you get a lot of business at one time, but many times you also lose it all at once. I felt that having a program with a positive emphasis on games could only help the industry and our business."

Plans are being made to present the promotion to other Pizza Hut districts to benefit Variety Clubs, of which there are branches in 29 of the nation's 30 major markets.

Harris is quick to advise operators contemplating such a promotion that "you have to do it well and be prepared to be detail oriented. If you don't plan to do it properly, don't do it at all, because the effect will be worse in the long run." •

YOUR FUTURE IN
VIDEO ENTERTAINMENT
HAS ARRIVED...
Be part of it...with VIDEOBOX...the new way to profit from the video revolution. With up to 1000 videos, computer reliability, programming flexibility and operator oriented controls, VIDEOBOX is advanced beyond the state of the art. Visit our booth and discover your profitable future in video entertainment... with VIDEOBOX.
VIDEOBOX NETWORKS, INC.
944 PARK AVENUE
NEW YORK, NEW YORK 10028
(212) 288-3190
VIDEOBOX™

Video-game industry still evolving

by Valerie Cognevich

Since May 1972, when Nolan Bushnell introduced *Pong*, a new concept in coin-operated entertainment, every video-game manufacturer has tried to make as great an impact on the playing public with its games. Fourteen years and hundreds upon hundreds of games later, manufacturers have made changes in the way they do business, but always with the same goal in mind—to produce games that give operators a fair return on investment and return enough profit to manufacturers to enable them to put out better and better games.

That may be an oversimplification of manufacturers' goals, but the bottom line is somehow to produce a game that will make money, one in which players are willing to plunk down their quarters.

Although it has been said lately that the video-game industry is merely a software market, the fact is it has always been a software market, and Japanese companies have had a major role since the early days. In fact, according to Paul Moriarity, president of Taito America, the first profit made by the company was from selling Hatachi 12-inch television sets to Atari for *Pong* games.

And though Taito licensed games to U.S. companies as far back as 1973, the more popular early video games were American-engineered and developed. Nevertheless, when Bushnell went to a Japanese trade show in the early '70s with his creations *Pong* and *Space Race*, he was surprised to see Japanese companies already showing similar games. And, naturally, Japanese companies bought from companies they knew. It seemed Japan was predicting events that would put Japanese companies ahead in the software race. The greatest change has been in the location of software developers, from the U.S. to Japan.

Video games did not fall from heaven to operators' locations and completely change an existing industry in a single year. Video games began with *Pong* and were hot in 1972, 1973, and 1974. But video-game popularity waned when electronic pins replaced cumbersome, service-plagued, electromechanical pins.

Pinball machines had led the industry since the '30s, and with the new solid-state technology, new emphasis was placed on them. It was pinball's heyday. Video games, meanwhile, were not spectacular, featuring black-and-white monitors and relatively simple play.

But video game manufacturers continued to develop videos, often while introducing new solid-state pinball machines. Midway licensed *TV Basketball* from Taito and set a production record of 1,400 games. Midway topped that record when it introduced *Wheels* and went on to sell 2,400.

In 1978, two games introduced at the AMOA show were destined to change history and the industry's focus. Ironically, they illustrate the competition between Japanese and American developers. *Space Invaders*, licensed by Midway from Taito, and *Atari Football*, American-designed, were, according to Moriarity, the *Gauntlet* and *Hang-On* of that year.

But *Space Invaders* took its place as the standard in video-game design, and by the next year, space was the accepted theme of video games. *Asteroids*, probably the second most popular space game, was introduced in 1979 by Atari. *Space Invaders* began a production run in October 1978 that didn't end until September 1980. More than 400,000 *Space Invaders* (legitimate and copies) blanketed the world. The video-game explosion had begun. Video games would dominate the coin-operated amusement industry for four years and enthrall the general population as none of the industry's machines had before.

Taito opened manufacturing facilities in the U.S., Atari and Bally expanded, pinball companies shifted their attention to video games, and designers and game developers were in great demand.

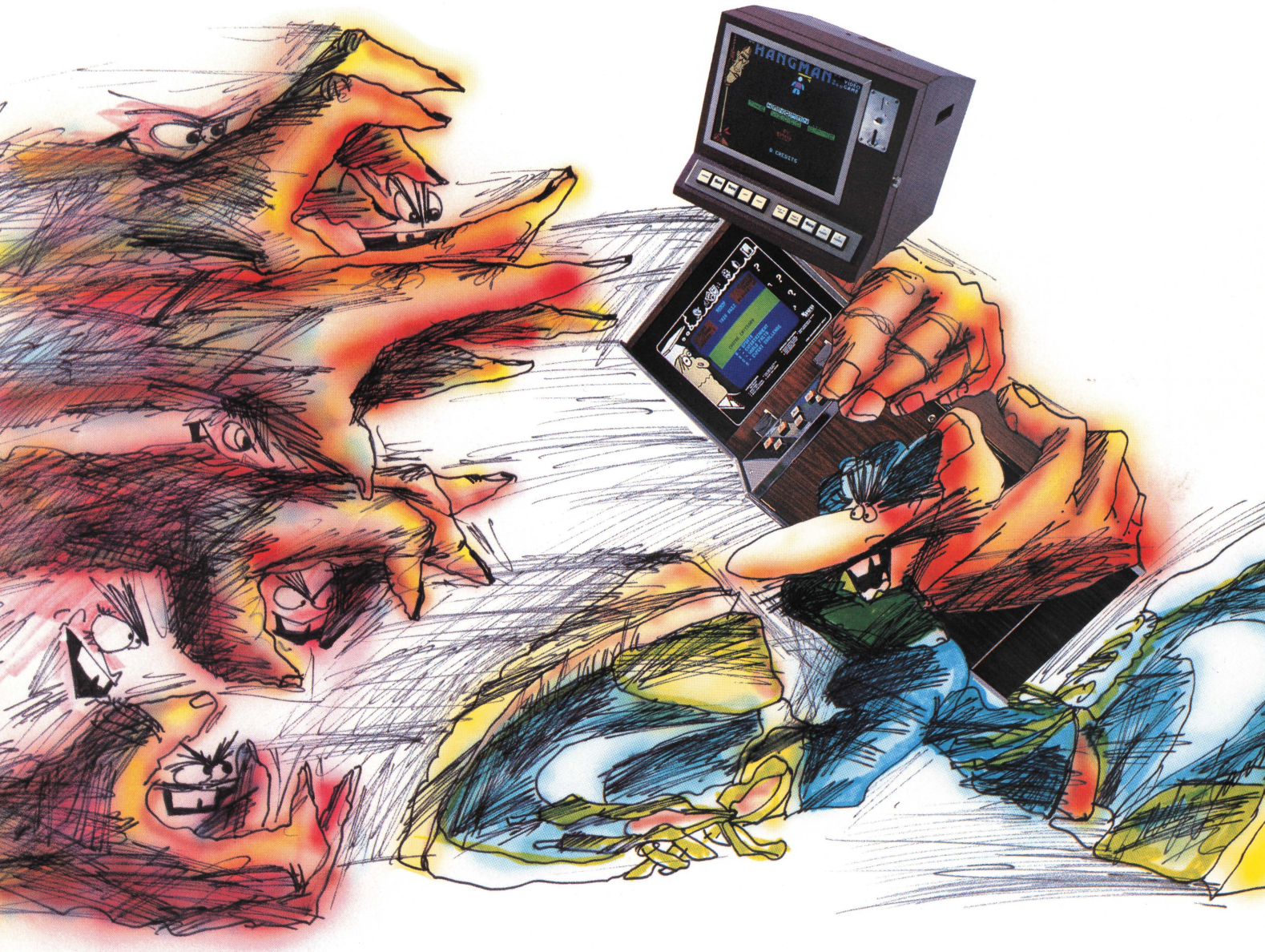
Eugene Jarvis, the Williams employee who developed the hit game *Defender*, became a role model for young designers. Moriarity noted that anyone who could program a computer thought he would be the next Eugene Jarvis and demanded a rock-star salary.

Once *Space Invaders* and subsequent space-themed games set the standard, there seemed no reason for companies not to take advantage of a theme that was overwhelming the market. Many chalked up popularity to the theme of the games, not realizing fully that players wanted any and all video games for video games' sake, so manufacturers really were not pressed for unique, different ideas.

Video-game fever turned to delirium, and manufacturers introduced more video games than anyone could have believed possible.

Moriarity, citing unrealistic development costs as a setback in American video-game design, said, "The creative edge in software development was lost in the U.S. because of the outrageous salaries paid to designers for relatively mediocre games. There existed what I call video-game fever, and almost everywhere you went there were

EVERYONE'S TRYING TO GET THEIR HANDS ON THE STATUS SYSTEM!™



HANGMAN . . . THE VIDEO GAME™

Colorful, entertaining graphics; variety of strategies can be used; thousands of puzzles; excellent alternative for your TRIVIA LOCATIONS; 256K Memory . . . and more!!

SUPER TRIV-QUIZ™

12 categories; 256K Memory; New Bonus scoring; "Lightning Round" for added excitement; THE ONLY TRIVIA YOU NEED OPERATE—
. . . AND DON'T FORGET:
TRIV I
TRIV II
TRIV III
TRIV IV
SPECIAL EDITION TRIV
SPORTS TRIV
SEX TRIV

THE CASINO STRIP SERIES

Soon to be Released . . .
BABY BOOM CHALLENGE™

Get your hands on a STATUS winner at our ACME Booth #550
Always available as counter-tops, uprights, kits and up-date conversions.

STATUS GAME CORP®

56 BUDNEY RD., NEWINGTON, CT 06111 (203) 666-1960
2901 SO. HIGHLAND DR., LAS VEGAS, NV 89109 (702) 731-4940
TELEX: 643318
NEW TOLL FREE #: 1(800) 835-7434

WHAC-A-MOLE

Everyone loves Whac-A-Mole!

Customers love to play and you'll love the way it pays. Call us and let us tell you more.

Bob's Space Racers, Inc.
427 15th Street
Daytona Beach, Florida 32017
Telephone: 904-677-0761
Manufactured in the U.S.A.
Makers of amusement games since 1970

TOKENS

VAN BROOK OF LEXINGTON #1 TOKENS WORLDWIDE

Complete Customer Service

VAN BROOK OF LEXINGTON

P.O. Box 5044
Lexington, Ky.
40505
606 • 231-7100

SPECIAL NOTICE
purchase your used equipment from
NEW ORLEANS NOVELTY CO.
In business for 50 years!
International reputation for selling the finest used videos, flippers, & amusement games available anywhere.
EACH & EVERY GAME BEAUTIFULLY REFINISHED LIKE NEW BY EXPERTS
All games authentic legal factory models
GET ON OUR MAILING LIST FOR OUR LATEST PRICE BULLETINS OR CALL
Rose, Eddie, or Jean for latest prices
3030 No. Arnoult Road
Metairie, LA 70002 * 504/888-3500

video games. After all, how many games can you play at a gas station while you're paying for gas?"

Nintendo's Bill Cravens agreed. "The major video-game manufacturers started believing the fantasy world being created by the popularity of video games," he said. "There was a groundswell, and companies were so geared up to lavish lifestyles, outlandish salaries, and shocking overheads that they finally stumbled.

"While on the other hand," Cravens continued, "the Japanese are more conservative, not high flyers, so they were able to move in because their engineers were more controlled in the marketplace."

While the world was still enjoying the success created by *Space Invaders* and game designs incorporating space themes (such as *Galaxian, Submarine, Galaxy, Cosmic Guerilla, Space Chaser, Galaxy Wars, Space Zap, Moon Base, Lunar Rescue, Moon Alien, Astro Fighter, Astro Invader, Star Gazer, Moon Cresta, Battlezone*, and *Mad Alien*), Midway did the unprecedented—it introduced a game called *Pac-Man* licensed from another Japanese company. It had none of the characteristics of the current hit games and it was, it was ... cute!

But contradictory as it seems, the most popular video game of all time was to mark the decline of video games. There was never anything better; no game came close to topping its popularity. Game design predictably moved in the direction of cute games. Soon there were *Crazy Climber, Scramble, Centipede, Berzerk, Lock 'N Chase, Donkey Kong, Frogger,* and *Kings and Balloons*. These games were easy to understand and unintimidating. Players loved them, and they attracted a previously untapped video-game player market—women.

Production runs were tremendous—more than 200,000 *Mrs. Pac-Man* and *Pac-Man* games were sold. Most runs were in the tens of thousands as dozens of new games poured into the market. Manufacturers were able to keep production facilities geared up almost constantly, usually taking a break only during the summer.

Then, according to Taito's Moriarity, "Engineers and those responsible for games became obsessed with having the latest technology, the most sophisticated software, the most dynamic wiz bang. They became lost in having the most outstanding explosion on the screen and forgot that a game had to be fun to play. I have file tapes that have mindboggling visual effects and slick interaction and unique things on the video screen, but they are not fun to play. Fireworks are fun to watch, but after a half an hour it's time to go home."

But it is agreed that American engineers and designers are not out of the picture. Cravens notes a trend away from the copycat-hit syndrome of past years. Video-game manufacturers are working to cut costs where possible. Said Bally's Steve Blattspeiler, "There have not only been changes in manufacturing, but changes in the way of doing business. The most significant is cutting costs. From an engineering standpoint, I have to hand it to Atari engineers who worked hard to cut costs. That game [*Gauntlet*] should and could have cost much more. Atari sold it at a very reasonable price."

Nintendo's Cravens agreed. "It was a hell of a buy. I don't see how Atari sold it as cheap as they did. They really gave operators a break."

Former Bally executive and co-owner of Grand Products, a new manufacturing company, Stan Jarocki said, "American manufacturers, to get a good game, are going to have to make a big investment in this business. They will have to invest in design engineers and tooling to make special video games. The super successful games are not going to be the ones gotten from offshore that all have the same buttons and knobs. It will be the ones like *Gauntlet* that are unique in design."

While most of the video games sold in the past two years have been kits, when they were introduced in the U.S., kits already had become established in Japan. Before cocktail-table games, according to Moriarity, the Japanese market was similar to the U.S.'s, with a blend of pinballs, jukeboxes, and uprights. But with the introduction of cocktail tables, games never left locations, and there was no after-market for them. Kits became popular in Japan. Jarocki said, "All those Japanese kits had the same controls and absolutely nothing exotic. The tables had no wear and tear, because the Japanese are easy on equipment, not like Americans, who are destructive on equipment, so the hardware was usable for a much longer time. A game in a location for two years still looked brand-new."

Kits found their way into the U.S., but it wasn't until Universal USA introduced *Mr. Do!* that the industry was convinced that kits could make

money. Those who tried to make a hit with kits tended to introduce only mediocre games in that form, others were offered only as dedicated. This only disillusioned operators. Cravens, with Universal at the time and largely responsible for the success of *Mr.Do!* and, ultimately, kits in general, said, "The economics of kits was needed. Everyone was caught up in unrealistic ideas and was starting to realize that you couldn't put a game in a bathroom and make money. So as operators closed up shop and sold routes there became available a lot of hardware. Like computers, just because you can't do something on the screen, you don't throw out the whole computer. You go get new software. So with that theory in mind, the kit concept was welcomed."

While operators, staggered by the video-game decline, were able to keep routes updated with relatively inexpensive kits while reducing debt, many manufacturers were reassessing their roles in the industry. Manufacturing operations shrunk, employees were laid off, companies merged, and licensing games became prevelant.

Manufacturers now face another problem, one that could mark the end of unique, well-engineered games—game copying. Said Moriarity, "There are many examples over the past couple of years of manufacturers investing megabucks in a game, and before they could effectively get it into the marketplace, [they] were cut down at the knees by unscrupulous copiers. In manufacturing, you don't make money on the first games out, you make them on the last ones out."

Moriarity continued, explaining, "If a manufacturer builds 3,000 games, he doesn't make a nickel on the first ones, breaks even between 2,000 and 2,500, and makes his money on the rest. Now if he only sells 2,000 because someone who didn't start a half a million in debt, because he didn't have to eat the three or four games that didn't make it, how does a manufacturer compete?"

A manufacturer must make a great financial commitment to develop or license a game, Moriarity said. "First I have to make a bet that I can sell the game. If I license a game, I must commit for X number of boards, I have to open a line of credit at a bank (maybe millions of dollars), then I have to add more money in shipping, artwork, wiring harness, etc. just to get that board from a factory in Japan to my distributors. If my terms are 30 days, I

Audio Visual Amusements

OFFERING THE FINEST
NEW AND USED EQUIPMENT
YOU'VE TRIED THE REST, NOW TRY THE BEST!!
We're Eager To Serve
1809 Olive Street, St. Louis, Missouri 63103
314/421-5100
for further information, call Pete Entringer collect

EFFICIENT

maintenance made easy

Dynamo's new PUSH LOK fastener makes normal maintenance fast and easy. Pocket liners can be replaced in a snap–without drilling, hammering and costly downtime. Its large head prevents the fastener from tearing the pocket liner or marring the balls.

If you're interested in making your maintenance easier and avoiding time-consuming service calls, call Dynamo today and find out how you can put a Dynamo table to work for you.

POOL TABLES — Dynamo — SOCCER TABLES

Dynamo Corporation (817) 589-7699
2525 Handley-Ederville Road Toll Free (800) 527-6054
Richland Hills, Texas 76118 Telex: 732 432

might get paid in 90. So I've got my millions tied up and haven't a nickel coming in yet. Then my distributor tells me that Joe Blow from Kokomo is offering the kit for $200 less."

Blattspeiler cites the copying problem as a reason to develop games in the U.S. "I'm content that we have our own developing team. I would be scared if we counted strictly on licensing. With our own development we can keep more control over copies. If it gets copied, it's usually after we've gotten our share. Whereas, by the time you license a game from a Japanese company, it's probably already out on location in Japan, and copies are hitting the market. For every game, there are probably nine copies."

Moriarity added, "The operators must wake up and realize that copies will only stop when they stop buying. You can't shut off the supply where there is demand. Taken to its logical extreme there could come a time where there are no good games because no one will want to make an investment in game development if they can't see a return of investment. After all, these copiers only go after the hits, but a lot of games are developed that someone must pick up the tab for."

But American games aren't being copied as Japanese games are. Jarocki said, "When we built *Spy Hunter* at Midway, it wasn't copied although it was a number-one game. It had a unique hardware package. *Gauntlet* is another example of a unique game copiers have shied away from. It was developed in-house. I feel if there is in-house development, problems will be less. I'm not knocking the licensed games, but the chance of being copied is tremendous."

The saturation of kits is leading to another trend in the industry, the need for good hardware. Said Mark Struhs of Dynamo, the company that is building games for Data East, "With kits dominating the market, we see a trend approaching where good hardware will be in demand. A converted game must look like brand new, or it will not attract play. A used cabinet and monitor can only be converted so many times before it is ready for the dump. Dynamo introduced a universal hardware system at the recent AMOA show to address this future need."

Blattspeiler agreed. "The only access to quality hardware and a quality conversion is quality cabinets, but the stuff out there now is shot."

Even though Japanese manufacturers' U.S. subsidiaries may be called marketing arms of the parent companies, their function is more than selling games. Moriarity said Taito may test several games a month before deciding to market one. "Each game we test may cost us $5,000 just to put out on test and do a feasibility report. If we do 100 a year, that's a lot of money. But there were games in the video heyday that never should have seen the light of day, ones I wouldn't touch today. Our function is to weed through and only offer the cream of the crop."

The companies that have contracted with factories to produce games have done so because they can't afford to maintain fixed production capability while their production demands fluctuate widely. Jarocki compared the video-game industry to the fresh-produce business. "It's very difficult for any manufacturer to guarantee numbers. If he makes 5,000 of one game, there is no assurance of 5,000 of the next. We are like the produce market, we must deliver when the product is hot. We are dealing in perishables. If a company has a hot game, but isn't able to gear up production, another company will come along and sell his product. Once a spot is lost for a game, it's lost forever. We don't get it back. So in a yo-yo production line, you are always training someone, giving up quality and trained workers.

"So Data East [with Dynamo] and Sega [with Williams] have contracted with reputable companies with professionals to build in the quality. They then only need to worry about marketing the product."

The outlook for video games is not all bleak, but manufacturers seem to agree that copy problems will dictate much of video-game design in the future. Designers very well could move on to other industries if research and development is not possible because of lost profits from game piracy. With less competition, there will be higher prices for anyone, confounding the logic used to justify buying copied games.

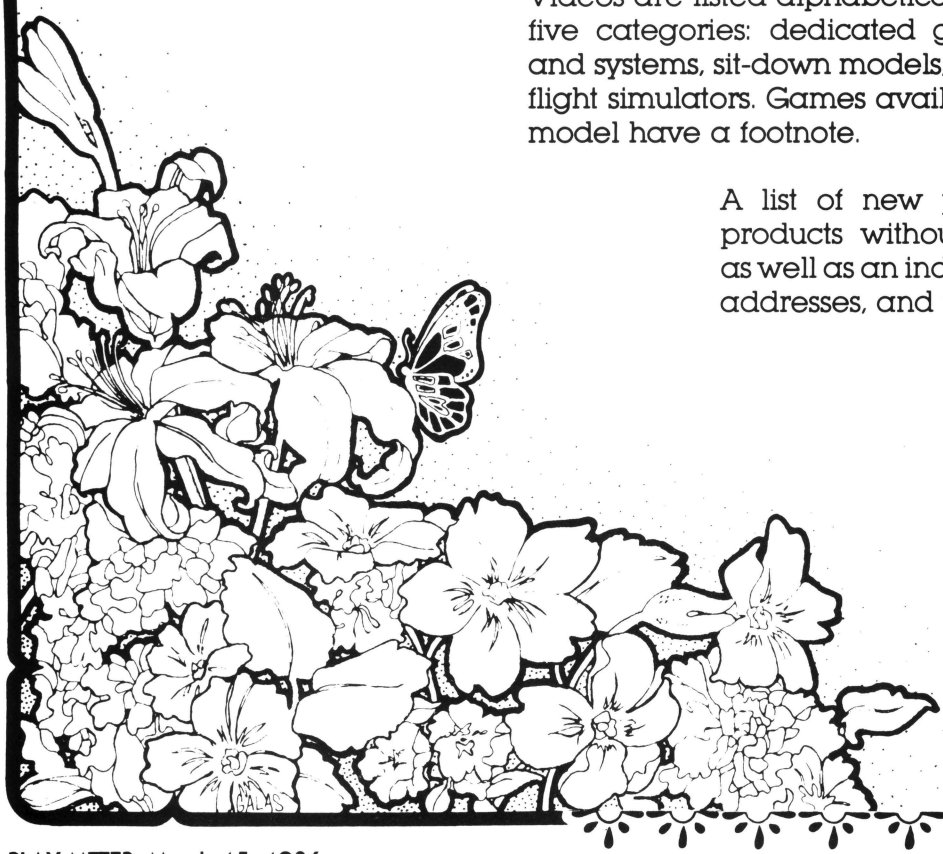
On the optimistic side, *Gauntlet* has proven that there is a place for exceptional dedicated video games. American designers at Bally are working to develop unique product. The unique products, the demise of the hit syndrome, and operators becoming more business-oriented may ensure the continuation of the video-game industry, but with radical improvements. •

1986 Spring Buyers Guide

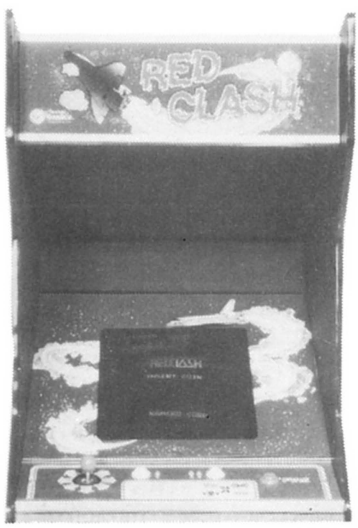
VIDEO GAMES

Videos are listed alphabetically by manufacturer in five categories: dedicated games, conversion kits and systems, sit-down models, laser-disc games, and flight simulators. Games available in more than one model have a footnote.

A list of new products and existing products without photographs follow as well as an index of company names, addresses, and telephone numbers.

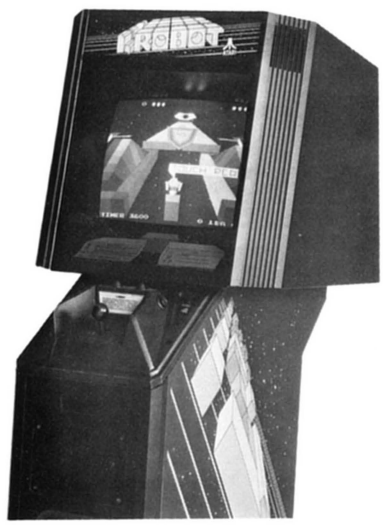


DEDICATED VIDEO GAMES



American Suntronics
Red Clash '82

Atari Games
Gauntlet '85



Atari Games
I, Robot '84

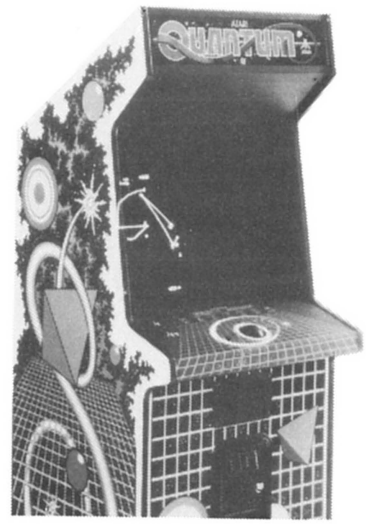
Atari Games
Return of the Jedi '84

Atari Games
Arabian '83

Atari Games
Food Fight '83

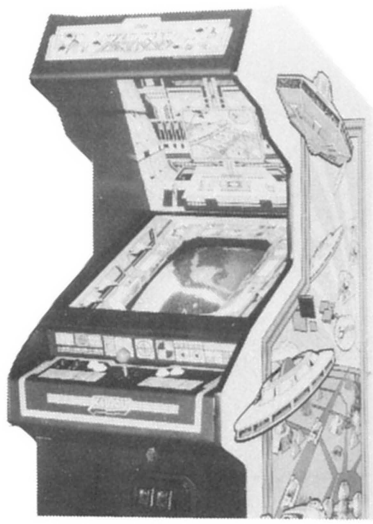
Atari Games
Liberator '83

Atari Games
Pole Position '83



Atari Games
Quantum '83

Atari Games
Star Wars '83*



Atari Games
Xevious '83

Atari Games
Dig Dug '82

Atari Games
Fast Freddie '82

Atari Games
Gravitar '82

Atari Games
Kangaroo '82

*also sit-down

Atari Games
Space Duel '82

ATW
Devil Fish '82

Bally Midway
Bank Panic '85*

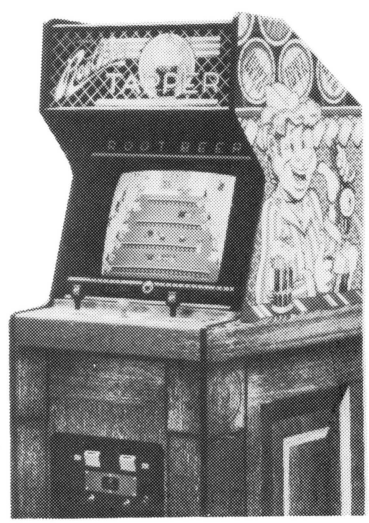
Bally Midway
Demolition Derby '85

Bally Midway
Demoliton Derby '85 Console

Bally Midway
Gaplus '85

Bally Midway
Pac Land '85**

Bally Midway
Timber '85

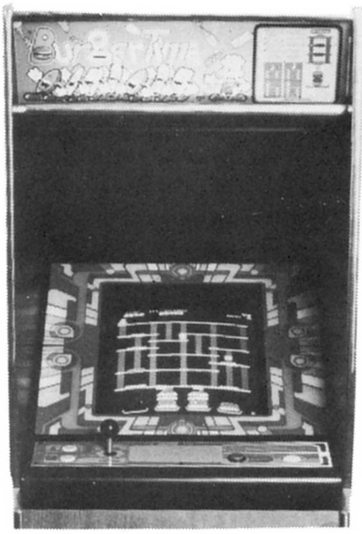


Bally Midway
Root Beer Tapper '84

*licensed from Sega **also kit

Bally Midway
Tapper '84

Bally Midway
Two Tigers '84



Bally Midway
BurgerTime '83

Bally Midway
Bump 'n' Jump '83

Bally Midway
Domino Man '83

Bally Midway
Journey '83

Bally Midway
Kosmik Krooz'r '83

Bally Midway
Mappy '83

Bally Midway
Professor Pac-Man '83

Bally Midway
Super Pac-Man '83

Bally Midway
Wacko '83

Bally Midway
Blueprint '82*

Bally Midway
Bosconian '82**

Bally Midway
Kick-man '82

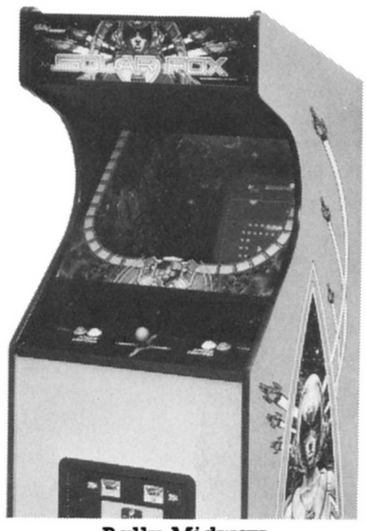
Bally Midway
Lazarian '82

Bally Midway
Ms. Pac-Man '82**

Bally Midway
Robby Roto '82

Bally Midway
Satan's Hollow '82

*also mini and cocktail **also slimline and cocktail



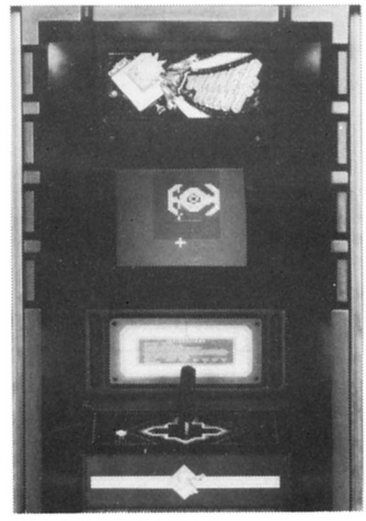
Bally Midway
Solar Fox '82*

Bally Midway
Tron '82

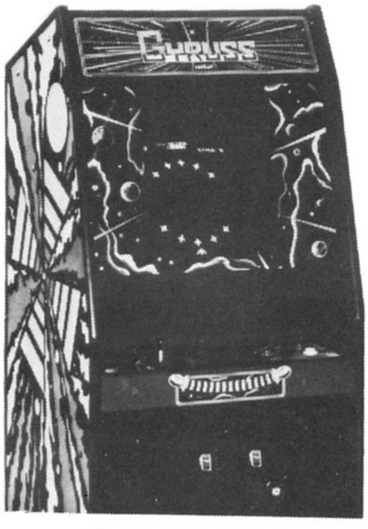
Centuri
Munch Mobile '83

Centuri
D-Day '82

Centuri
Swimmer '82



Centuri
Tunnel Hunt '82



Centuri/Konami
Gyruss '83

Centuri/Konami
Time Pilot '83

Centuri/Konami
Loco-Motion '82

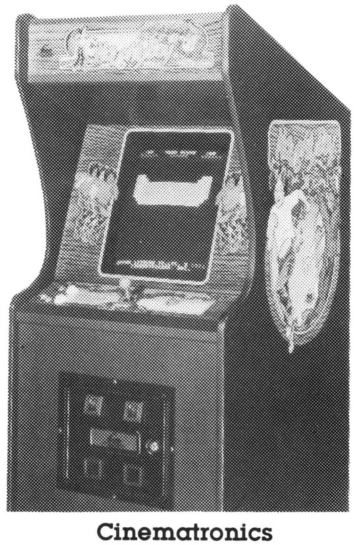
*also slimline and cocktail

Cinematronics
Freeze '85*

Cinematronics
Cosmic Chasm '83

Cinematronics
War of the Worlds '83

Cinematronics
Jack the Giantkiller '82



Cinematronics
Naughty Boy '82**

Data East USA
Commando '85

Data East USA
Karate Champ '85

Data East USA
Kung Fu Master '85

Data East USA
Ring King '85*

*also kit **also cocktail

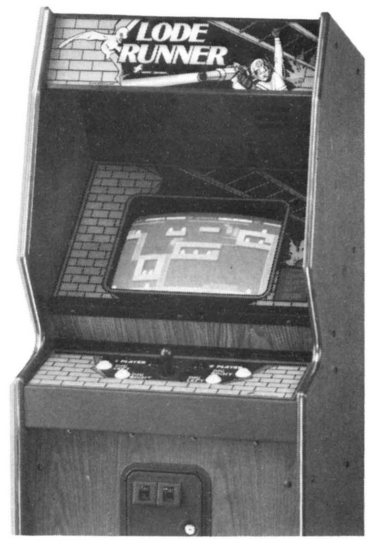
Data East USA
Shootout '85

Data East USA
Bommer Rang'r '83*

Data East USA
Cluster Buster '83

Data East USA
Tag Team Wrestling '83

Destron
Slither '82



Digital Controls
Lode Runner '85*

Digital Controls/Taito America
Ghosts 'N Goblins '85

Enter-Tech
Big Paw's Cave '84

Enter-Tech
Leprechaun '83

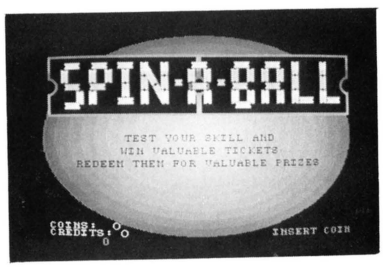
*also kit

Enter-Tech
Noah's Ark '83

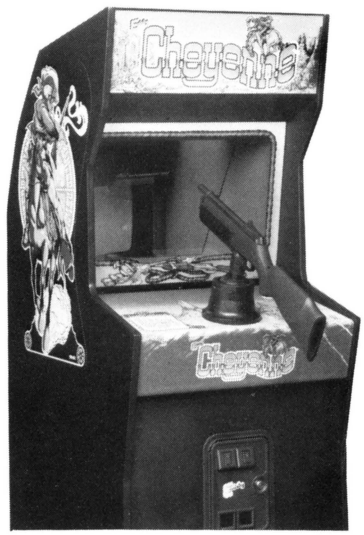
Enter-Tech
Desert Race '82

Enter-Tech
Tugboat '82

Exidy
Chiller '86•



Exidy
Spin-A-Ball '86•



Exidy
Cheyenne '84•

Exidy
Fax II '84••

Exidy
Crossbow '83•

Exidy
Fax '83••

•also kit ••*Fax* and *Fax II* feature trivia questions

Exidy
Victory '82

Game-A-Tron
Dambusters '82

Game-A-Tron
Got-Ya '82

Kitkorp
Chinese Hero '85*

Kitkorp
Crowns Golf '85**

Konami
Circus Charlie '84

Konami
Hyper Sports '84

Konami
Track & Field '83

Monroe Manufacturing
Birdie King II '83

*also kit **also cocktail and kit

Mylstar
Three Stooges '84

Mylstar
Krull '83

Mylstar
Mad Planets '83

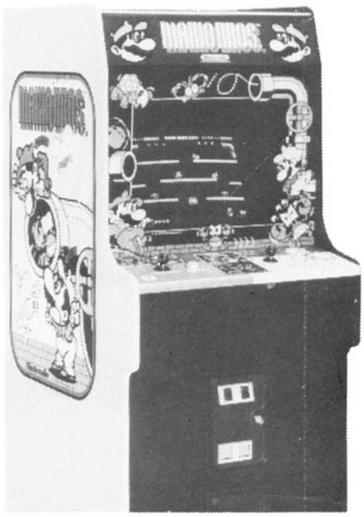
Mylstar
Q*bert '83

Mylstar
Reactor '82

Nichibutsu
Roller Jammer '85

Nintendo of America
Super Punch Out!! '85*

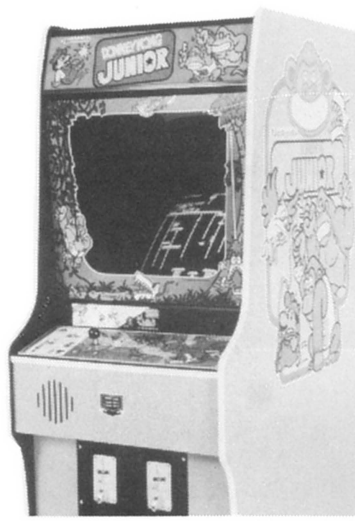
Nintendo of America
Punch Out!! '84



Nintendo of America
Mario Bros. '83

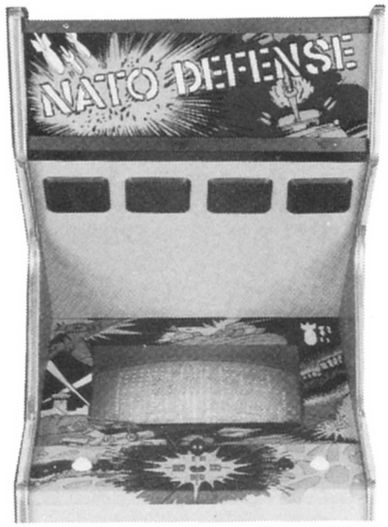
*also kit

Nintendo of America
Popeye '83



Nintendo of America
Donkey Kong Junior '82

Pacific Novelty
Mr.F. Lea '83



Pacific Novelty
NATO Defense '82

Pacific Novelty
Thief '82

Photar
Megadon '83

Rock-Ola
Nibbler '83

Rock-Ola
Eyes '82*

Rock-Ola
Fantasy '82

*also cocktail

Rock-Ola
Jump Bug '82

Samyra
Caterpillar '82

Sega
Hang-On Mini '86

Sega
Shooting Master '86

Sega
Hang-On '85*

Sega
Pitfall II '85

Sega
Champion Baseball '83**

Sega
Congo Bongo '83

Sega
Star Trek '83***

*also sit-down and ride-on **also cocktail, now in Wico kit ***also sit-down and kit

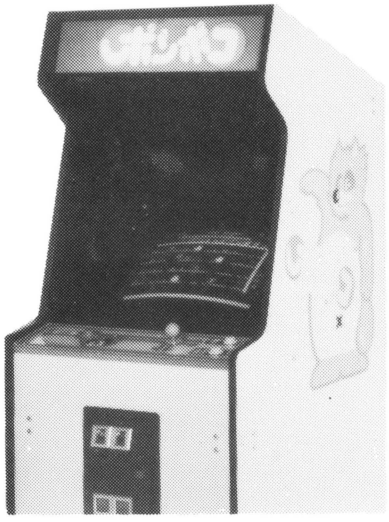
Sega
Pengo '82*

Sega
Subroc 3D '82**

Sega
Turbo '82***

Sega
Zaxxon '82

Sega
Zektor '82



Sigma Enterprises
Ponpoko '82

Stern
Great Guns '83

Stern
Mazer Blazer '83

Stern
Super Bagman '83

*also cocktail **also sit-down and cocktail ***also sit-down

Stern
Tazz-Mania '82

Stern
Tutankham '82

Taito America
The Legend of Kage '86*

Taito America
10-Yard Fight '84

Taito America
Change Lanes '83

Taito America
ZooKeeper '83*

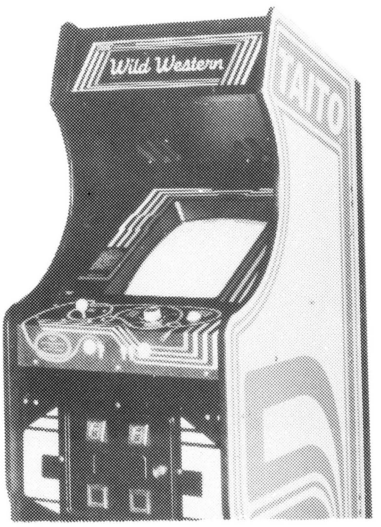
Taito America
Alpine Ski '82

Taito America
Kram '82

Taito America
Space Dungeon '82

*also kit

Taito America
The Electric Yo-Yo '82



Taito America
Wild Western '82

Tehkan, Inc.
World Cup Soccer '86

Tehkan, Inc.
Gridiron Fight '85

Thomas Automatics
Oli-Boo-Chu '82

Thomas Automatics
Triple Punch '82*

Tuni
Dazzler '82*

Tuni
Radar Zone '82*

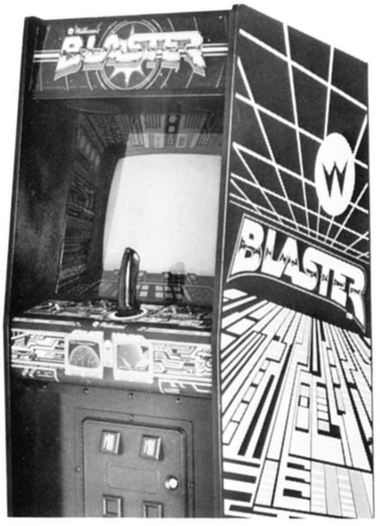
Universal USA, Inc.
Snap Jack '82

*also cocktail

U.S. Billiards
800 Fathoms '82

Williams Electronics
Inferno '85

Williams Electronics
Turkey Shoot '84



Williams Electronics
Blaster '83*

Williams Electronics
Bubbles '83

Williams Electronics
Motorace USA '83

Williams Electronics
Mystic Marathon '83*

Williams Electronics
Sinistar '83

Williams Electronics
Joust '82**

*also kit **also two-player novelty pin

Williams Electronics
Moon Patrol '82

Williams Electronics
Robotron 2084 '82

Zaccaria
Shooting Gallery '85

Zaccaria
Money Money '83

DEDICATED VIDEO GAMES

(photos not available)

Bally Midway
Sarge '85

Bally Midway
Spy Hunter '84
(also sit-down and pinball version)

Centuri/Konami
Mikie '85
(also kit)

Cinematronics
World Series '85
(also kit)

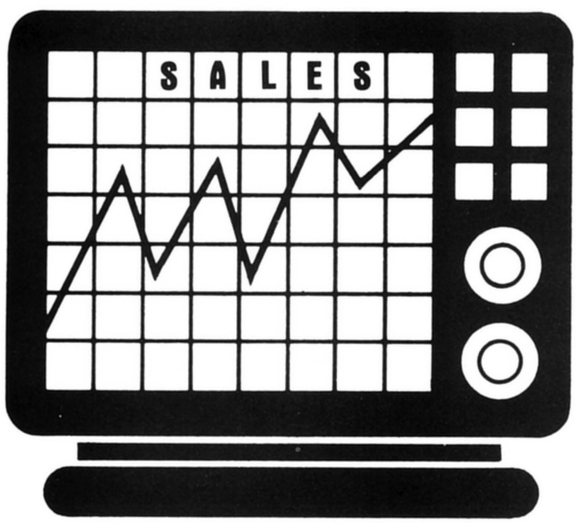
Exidy
Combat '85
(also kit)

Exidy
Crackshot '85
(also kit)

Monroe Manufacturing
Birdie King III '85
(also cocktail and kit)

Monroe Manufacturing
Buggy Challenge '85
(original upright, also sit-down)

Sega
Space Harrier '86
(upright, sit-down, and rolling cabinet)



GOOD ADVERTISING
PROMOTES
SUCCESSFUL SALES
CALL
PLAY METER
504/488-7003

CONVERSIONS AND SYSTEMS

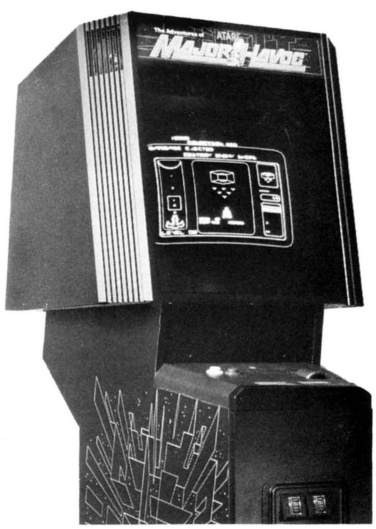
Atari Games
Empire Strikes Back '85*

Atari Games
Marble Madness '85

Atari Games
Peter Pack Rat '85

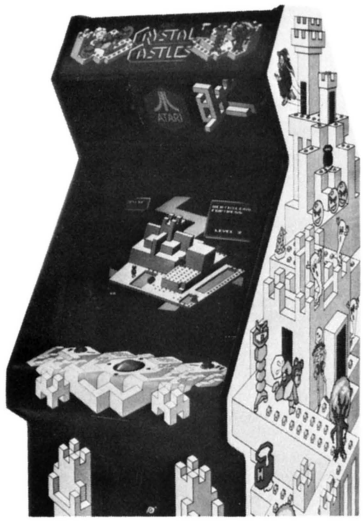
Atari Games
Indiana Jones and the Temple of Doom '85

Atari Games
Paperboy '85



Atari Games
Major Havoc '84

*for *Star Wars* upright and cockpit



Atari Games
Crystal Castles '83

ATW
Demon Castle '83

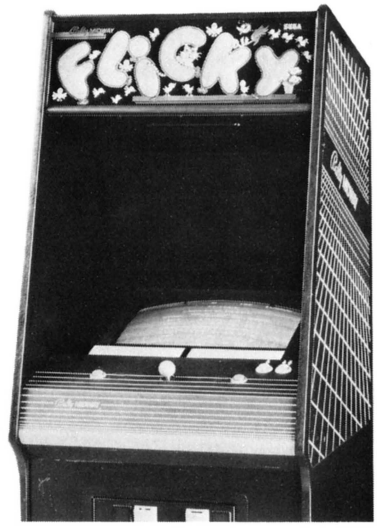
Bally Midway
Galaga 3 '85

Atari Games
Millipede '83

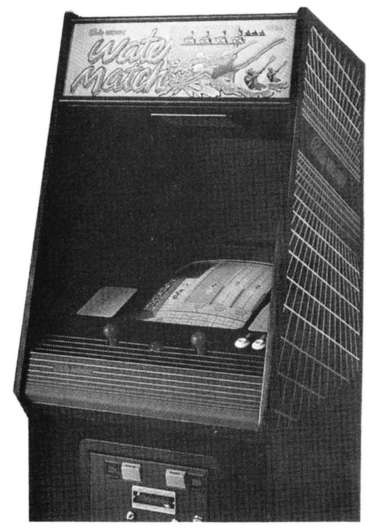
ATW
New Sinbad '82

Bally Midway
S.W.A.T. '85••

Atari Games
Pole Position II '83•

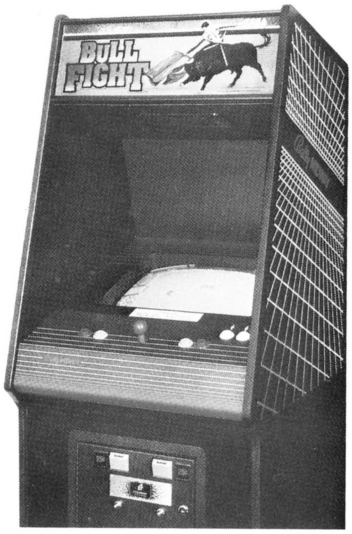


Bally Midway
Flicky '85••



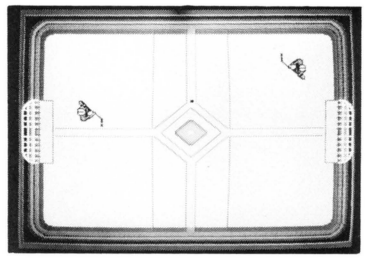
Bally Midway
Water Match '85••

•also sit-down ••part of Bally Midway's Six-Pack conversion kit system



Bally Midway
Bull Fight '84*

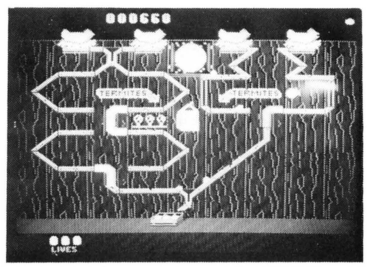
Bally Sente
Sac I Cabinet '85



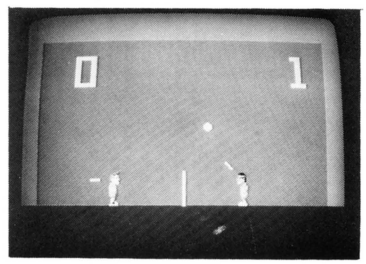
Bally Sente
Hat Trick '85

Bally Sente
Mini Golf '85**

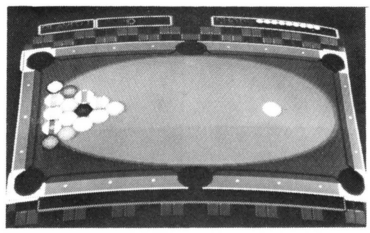
Bally Midway
Mr. Viking '84*



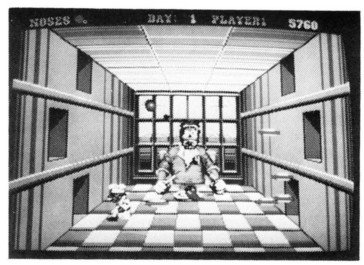
Bally Sente
Chicken Shift '85



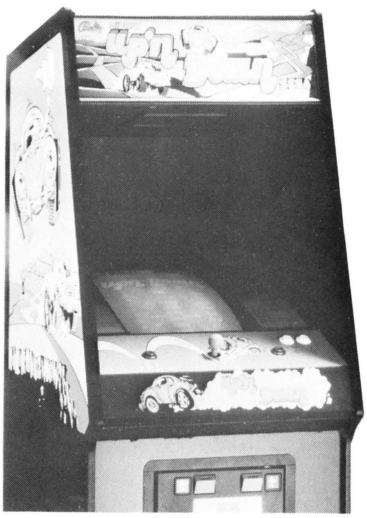
Bally Sente
Off the Wall '85



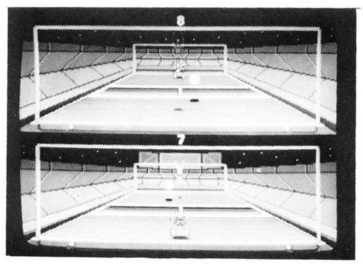
Bally Sente
Gimme A Break '85**



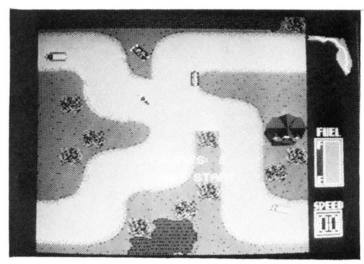
Bally Sente
Snacks 'N Jaxson '85



Bally Midway
Up 'N Down '84*

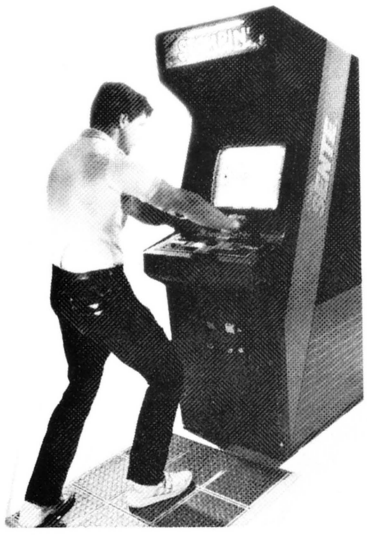


Bally Sente
Goalie Ghost '85

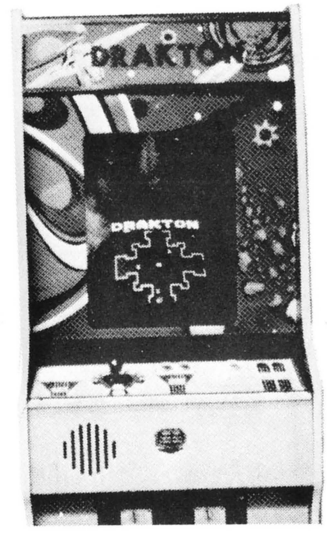


Bally Sente
Stocker '85

*part of Bally Midway's Six-Pack conversion kit system



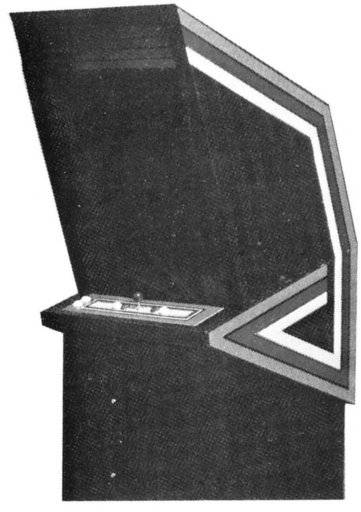
Bally Sente
Stompin' '85*



Cardinal Amusements
Drakton '85

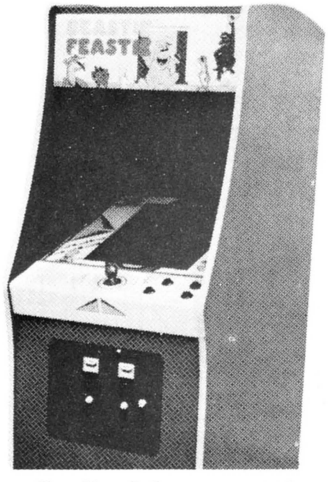
Cinematronics
Scion '85

Bally Sente
Trivial Pursuit '85**



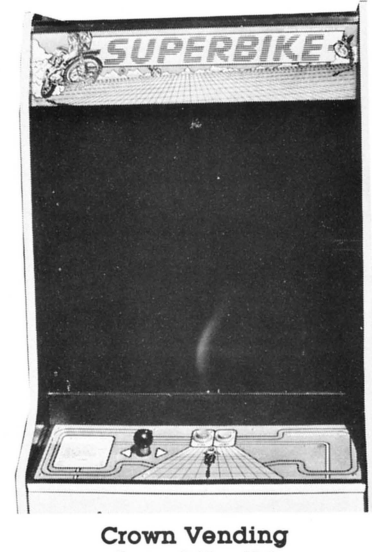
Cinematronics
Cerberus '85

Coindata. Inc.
Big Bucks Trivia Quest '86***



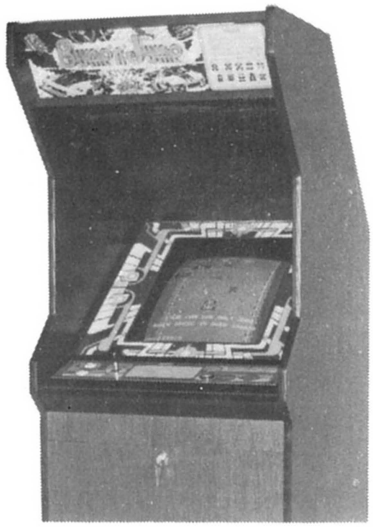
Cardinal Amusements
Beastie Feastie '85

Cinematronics
Mayhem 2002 '85

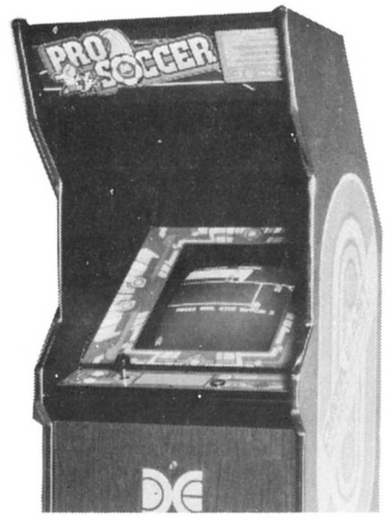


Crown Vending
Superbike '84

*first Floorplay game **available in five versions
***conversion for *Pac-Man* and *Ms. Pac-Man*, licensed from Dynasoft

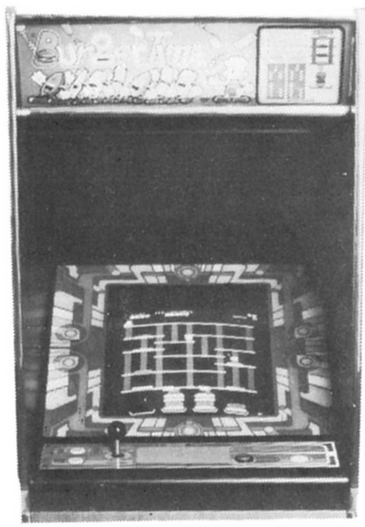


Data East USA
Bump 'N Jump '83*



Data East USA
Pro Soccer '83*

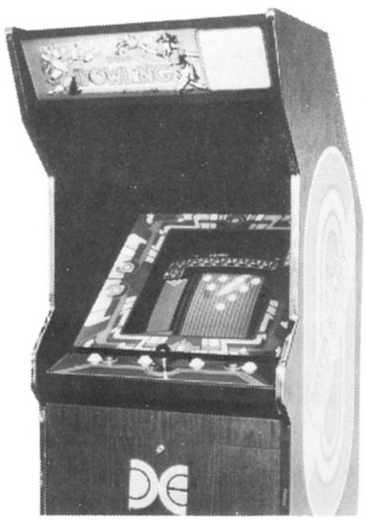
Data East USA
Mission X '82*



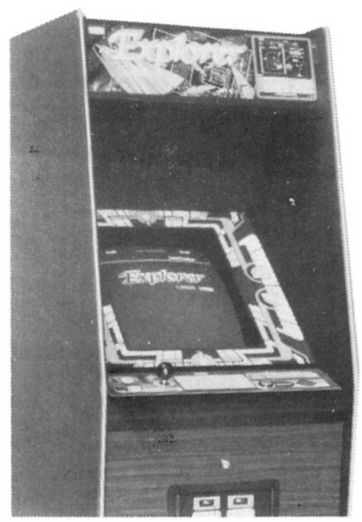
Data East USA
BurgerTime '83*

Data East USA
Disco No. 1 '82*

Data East USA
Pro Golf '82*



Data East USA
Pro Bowling '83*



Data East USA
Explorer '82*

Eastern Micro
Dinosaurs '83

*part of the Data East Deco Cassette System

Eastern Micro
Hoccer '83

Exidy
Bristles '84

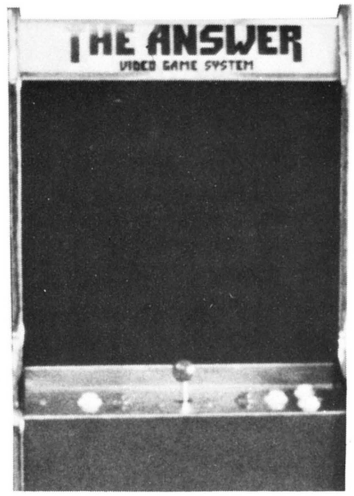
Grayhound Electronics
Video Trivia '85**

Exidy
Astro Chase '84

Exidy
Flip & Flop '84

Kitkorp
Grown's Golf in Hawaii '85***

Exidy
Boulder Dash '84



Game Operators Corp.
The Answer '85*

Kitkorp
Cruisin '85****

---

*convertible, universal game system; upright or cocktail
**also kit, cabaret, cocktail and countertop
***licensed from Sega
****licensed from Jalco, Ltd.

Kitkorp
Metro Cross '85*

Konami
Road Fighter '85

Konami
Wizz Quiz '85

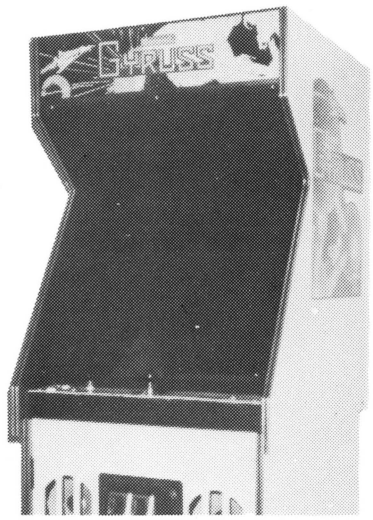
Kitkorp
TNK III '85**

Konami
Rush 'N Attack '85

Konami
Yie Ar Kung Fu '85

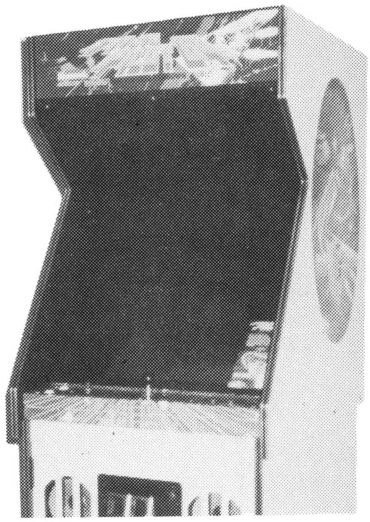
Konami
Nemesis '86***

Konami
Super Basketball '85

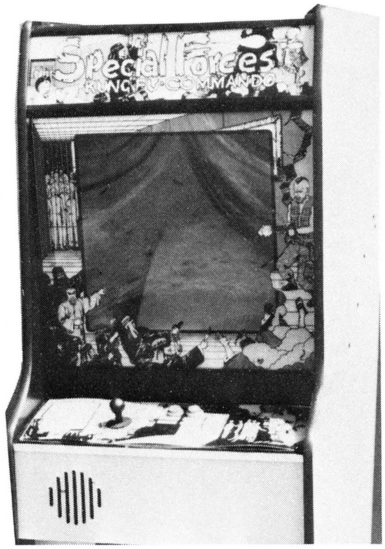


Konami
Gyruss '84

*licensed from Namco **licensed from SNK
***housed in OMNI upright cabinet with universal convertibility



Konami
Time Pilot '84



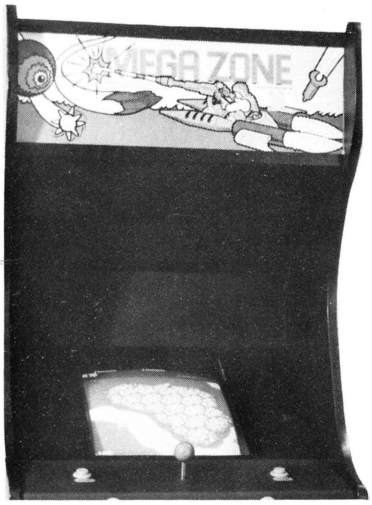
Magic Electronics
Special Forces-Kung Fu
Commando '85*

Memetron
The Shanghai Kid '85***

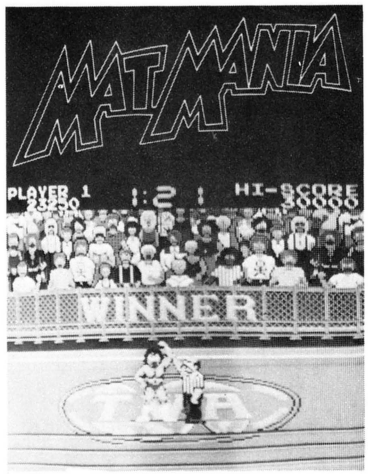
Konami
Pandora's Palace '84

Magic Electronics
The Glob '83

Merit Industries
Tic Tac Trivia '85****



Konami
Mega Zone '83

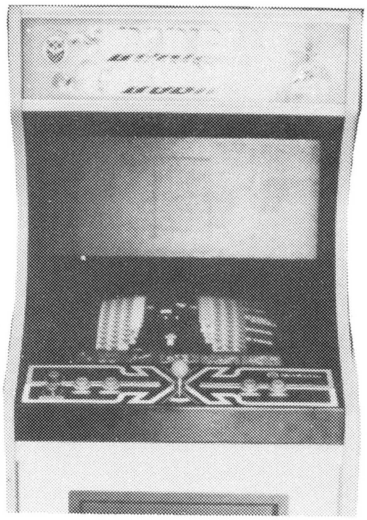


Memetron
Mat Mania '85**

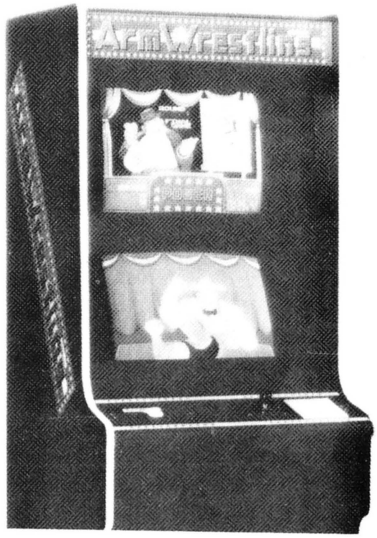
Merit Industries
Trivia Whiz '85****

*conversion for *Donkey Kong, Donkey Kong Jr.* and *Pac-Man* **licensed from Taito America
***licensed from Data East ****also cabaret, cocktail and countertop

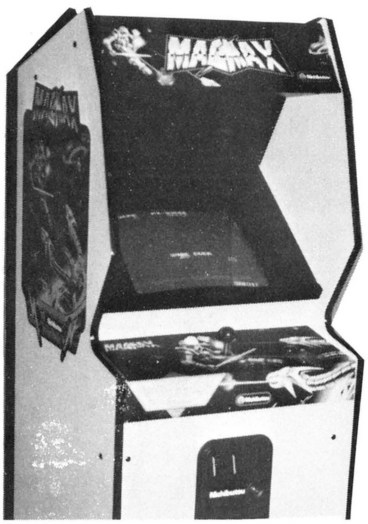
New Technology
The Time Machine '84*



Nichibutsu USA
Radical Radial '83



Nintendo of America
Arm Wrestling '85

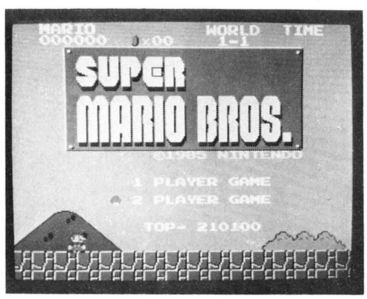


Nichibutsu USA
Magmax '85

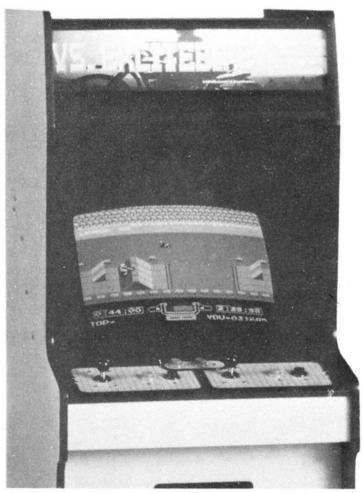
Nichibutsu USA
Rug Rats '83

Nintendo of America
VS. Duck Hunt '85**

Nichibutsu USA
Seicross '84

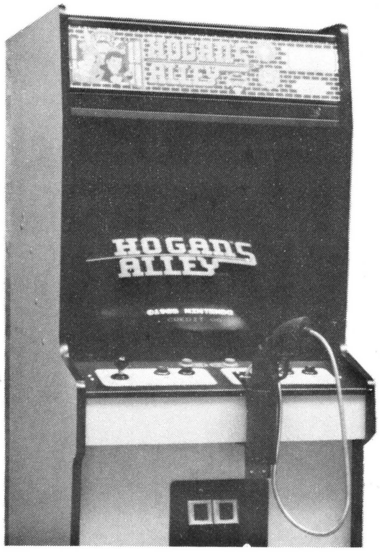


Nintendo of America
VS. Super Mario Bros. '86**

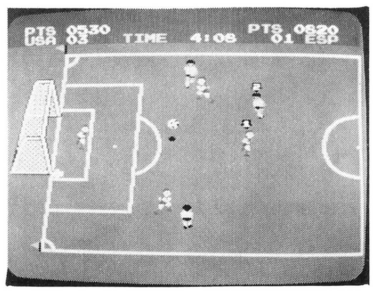


Nintendo of America
VS. Excitebike '85**

*provides 32 games in one cabinet
**VS. System games available in single monitor (Unisystem), dual screen (Dualsystem), or Dualsystem Sit-Down

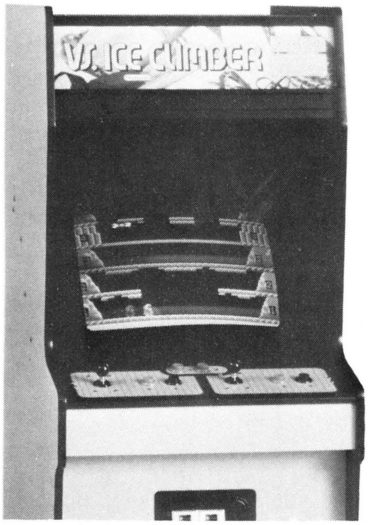


Nintendo of America
VS. Hogan's Alley '85*

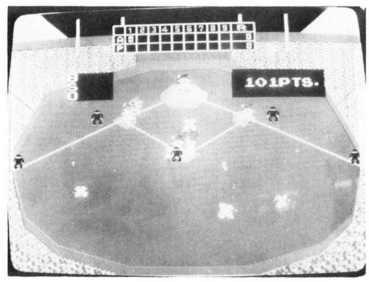


Nintendo of America
VS. Soccer '85*

Nintendo of America
VS. Tennis '84*

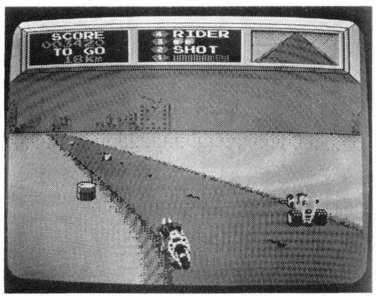


Nintendo of America
VS. Ice Climber '85*



Nintendo of America
VS. Baseball '84*

Nintendo of America
Donkey Kong 3 '83



Nintendo of America
VS. Mach Rider '85*

Nintendo of America
VS. Golf & VS. Pinball '84*

Nova Games
Intrepid '84

*VS. System games available in single monitor (Unisystem), dual screen (Dualsystem), or Dualsystem Sit-Down

NSM
Video Body '85*

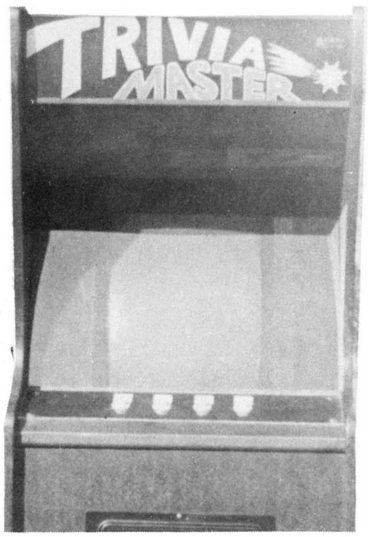
Romstar
Battle Lane '86***

Romstar
Gunsmoke '85

PGD
Complex X '85**

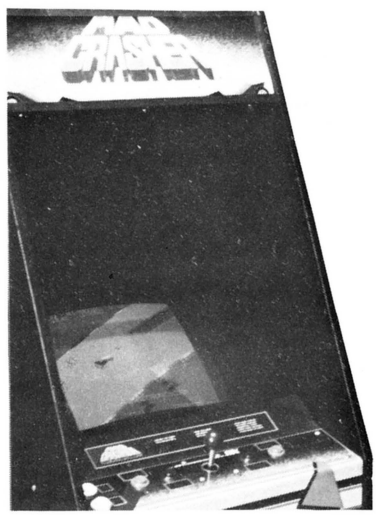
Romstar
1942 '85****

Romstar
Tiger Heli '85



PGD
Trivia Master '85

Romstar
Ghosts 'N Goblins '85

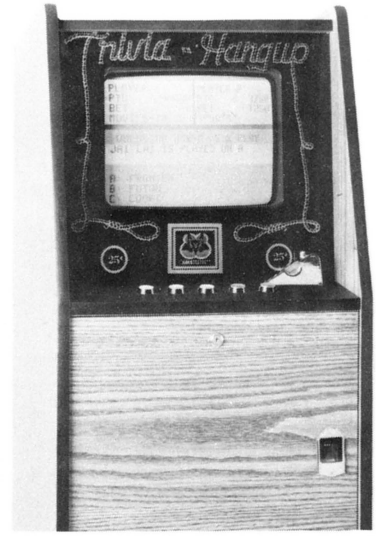


Romstar
Mad Crasher '84

*universal system for any PCB **dedicated PCB kit or E-Prom kit
***plug-in kit for *Pac-Man, Ms. Pac-Man, Super Pac-Man, Galaxian* and *Centipede* ****licensed from Capcom

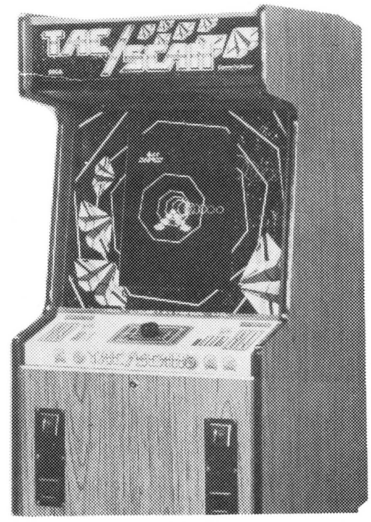
Romstar
Vulgus '84

Sega
Super Zaxxon '83



SMS
Trivia Hang-Up '85****

Sega
Choplifter '85



Sega
Tac/Scan '82**

Status Game Corp.
Hangman '85*****

Sega
Star Trek '83*

Sega
005 '82***

Status Game Corp.
Trivia Quiz '85*****

---

*also dedicated and sit-down **convert-a-game upright
also cocktail ****also cabaret and countertop ** upright countertop, cocktail, and kit

Stern
Bagman '83

Taito America
The Tin Star '84

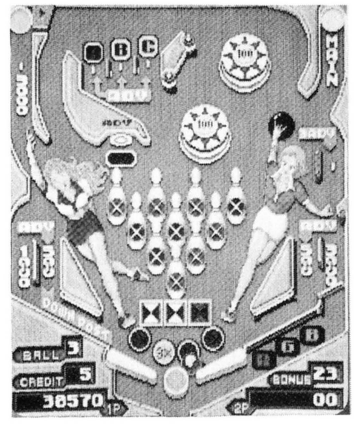
Trade West
Alpha Mission '86

Stern
Lost Tomb '83

Taito America
Zookeeper '84

Universal USA, Inc.
Mr. Do!'s Wild Ride '84

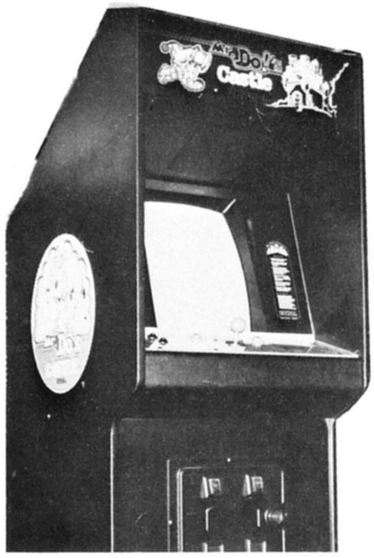
Taito America
Exerion '84



Tehkan, Inc.
Pinball Action '85

Universal USA, Inc.
Jumping Jack '84

*licensed from SNK



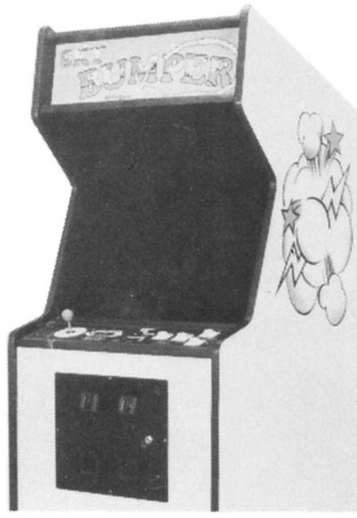
Universal USA, Inc.
Mr. Do!'s Castle '83

Venture Line
Espial '83

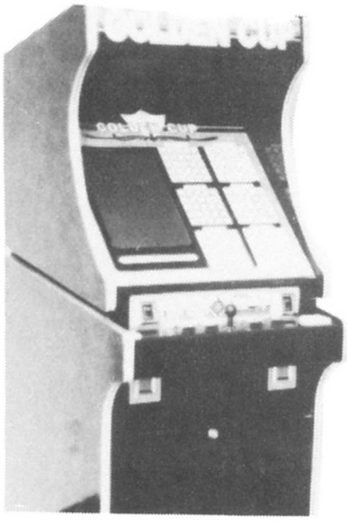
Venture Line
Ponpoko '83

Universal USA, Inc.
Mr. Do! '82*

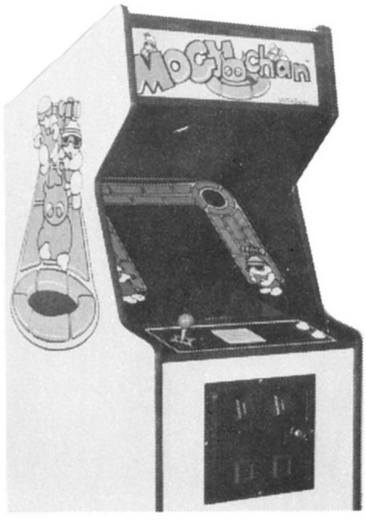
Venture Line
Hunchback '83



Venture Line
Sky Bumper '83



Venture Line
Golden Cup '84



Venture Line
Moguchan '83

Venture Line
Sky Lancer '83

*also cocktail

Venture Line
Super Rider '83

Venture Line
Xargon '83

Venture Line
Looping '82

GOOD
ADVERTISING
CREATES
AN
APPETITE

CALL PLAY METER
504/488-7003

Wico Corp.
Champion Baseball '83

Williams Electronics
Aeroboto '85

CONVERSIONS AND SYSTEMS

(photos not available)

Bally Sente
Name That Tune '86
(system game available in mid-'86)

Bally Sente
Sac Man conversion kit
(designed to convert *Pac-Man, Ms. Pac-Man,* and *Galaxian* into the Sac I game system; now extends to games by other manufacturers)

Bally Sente
Team Hat Trick '85
(upright and cocktail)

Cardinal Amusements
Street Heat '85
(conversion for *Donkey Kong* and *Donkey Kong Jr.*)

Capcom USA, Inc.
Section Z '86

Coindata, Inc.
Bogey Manor '85
(licensed from Technos Japan)

Coindata, Inc.
Farmers Rebellion '85
(licensed from Sun Electronics)

Coindata, Inc.
High Voltage '85
(licensed from Alpha Denschi)

Coindata, Inc.
Ninja Kun '85
(licensed from UPL)

Coin-It
Halley's Comet '86
(licensed from Taito Japan, available in late March)

Coin-It
Buggy Challenge '85
(conversion for Sega *Turbo* upright, also cockpit and mini)

Digital Controls
Penguin Wars '86

Entertainment Sciences
Turbo Sub '85

Kitkorp
Return of Invaders '85
(licensed from Taito)

Konami
Iron Horse '86

Konami
Jailbreak '86

Konami
Konami GT '86

Konami
Kicker '85

Magic Electronics
Hex Pool '86

Magic Electronics
Nun Chakun '86

Magic Electronics
Bullseye Darts '85
(conversion for *Centipede, Donkey Kong* and *Donkey Kong Jr.*)

Magic Electronics
Driving Force '85
(conversion for *Galaxian* and *Pac-Man*)

Magic Electronics
8 Ball Action '85
(conversion for *Donkey Kong, Donkey Kong Jr.* and *Pac-Man*)

Magic Electronics
Field Combat '85
(licensed from Assoc. Overseas Mfg.)

Magic Electronics
Grobda '85
(licensed from Assoc. Overseas Mfg.)

Magic Electronics
Porky '85
(conversion for *Pac-Man*)

Magic Electronics
Poseidon Sea Fighter '85
(licensed by Taito to Magic and Montgomery Vending)

Magic Electronics
Samurai '85

Magic Electronics
The Wiz '85

Memetron
Atomic Boy '85
(licensed from Irem)

Memetron
Savage Bees '85
(licensed from Capcom)

Memetron
Ten Yard Fight '85

Nichibutsu USA
Galivan '86

Nichibutsu USA
Mighty Guy '86
(available in late Spring)

Nichibutsu USA
Terra Cresta '85

Nintendo of America
VS. Gumshoe '86

Nintendo of America
VS. Ladies Golf '84

Remark Industries
LA Trivia Madness '86
(upright, countertop, and sit-down)

Remark Industries
LA Trivia Challenge '85
(upright, countertop, and sit-down)

Romstar
Great Swordsman '85

Romstar
Hal 21 '85

Romstar
Kickstart '85

Romstar
Son Son '85

Status Game Corp.
Super Triv '85
(upright, countertop, cocktail, and kit)

Sunn International
Lizard Wizard '85
(conversion for *Pac-Man* and *Ms. Pac-Man*)

Tehkan, Inc.
American Football '85

Universal USA, Inc.
Do! Run Run '85

Universal USA, Inc.
Indoor Soccer '85

Wico Corp.
Regulus '85

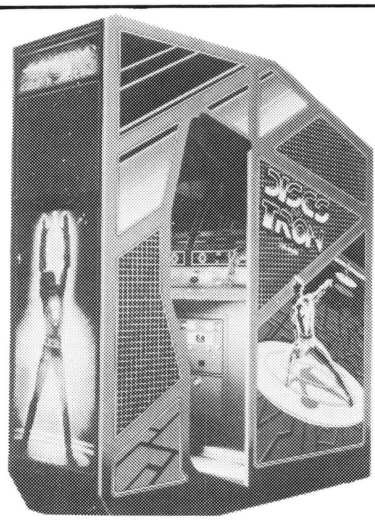
SIT-DOWN VIDEO GAMES

Atari Games
Pole Position II '84*

Atari Games
TX-1 '84

Atari Games
Star Wars '83*

Bally Midway
Spy Hunter '84**



Bally Midway
Discs of Tron '83

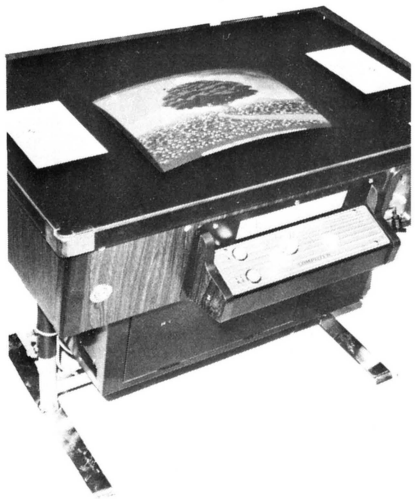
Nichibutsu USA
Tube Panic '84

Nintendo of America
VS. Dualsystem Sit-Down***

*also upright **also upright and pinball version ***for Nintendo VS. System games

Sega
G.P. World '85

Sega
Hang On Ride-On '85*



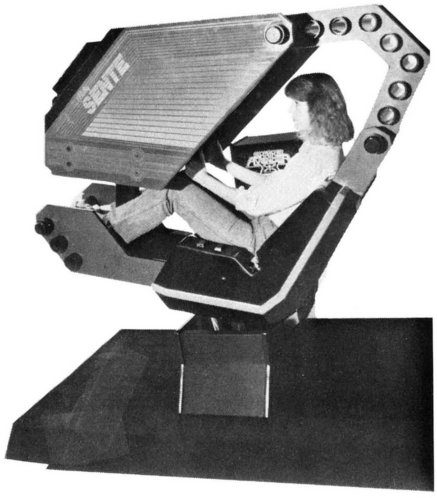
Sigma Enterprises
Akazukin '84

FLIGHT SIMULATOR GAMES

(photos not available)

Amusement Technology
Max Experience '85

Exidy
Vertigo '85

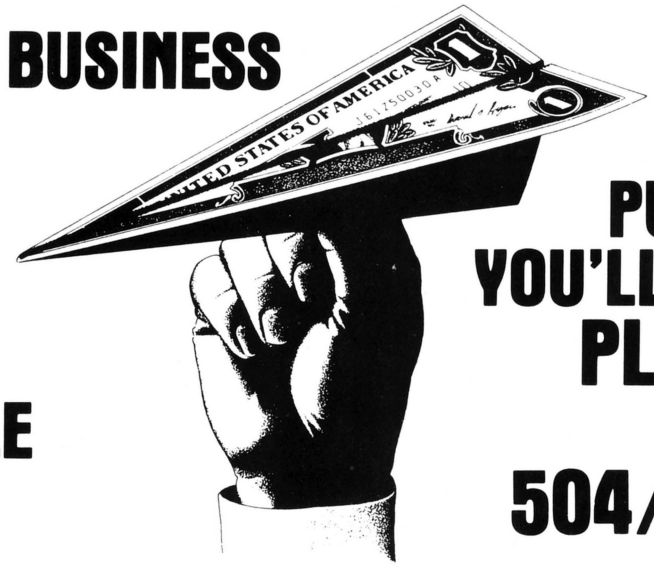


Bally Sente
Strike Avenger '85

Colorado Game Exchange
Hot Seat '85

*also upright and sit-down

AIM YOUR BUSINESS EXPENSE DOLLARS IN THE MOST PROFITABLE DIRECTION



THE ONLY TRADE PUBLICATION YOU'LL EVER NEED
PLAY METER
SUBSCRIBE
504/488-7003

LASER DISC VIDEO GAMES

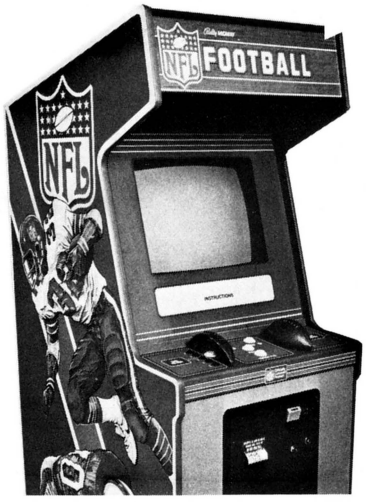
(photos not available)

Funai/ESP
Esh '85*

Universal USA, Inc.
Super Don Quix-ote '85
(laser system, dedicated, and kit)

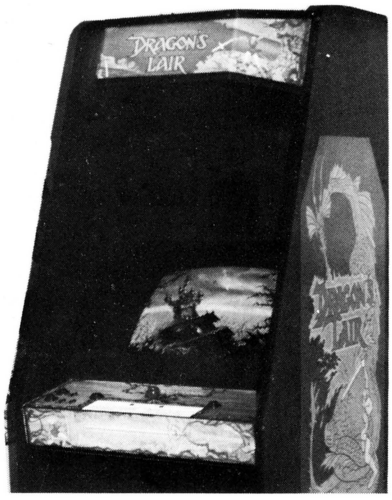
Atari Games
Firefox '84

Bally Midway
Galaxy Ranger '84*



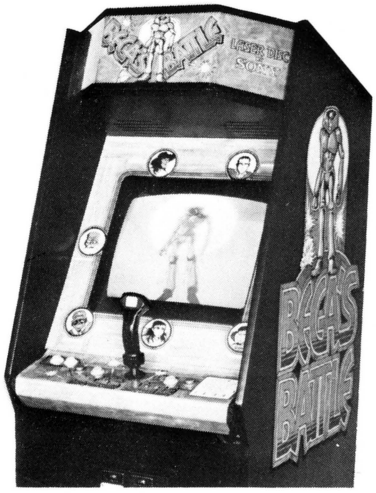
Bally Midway
NFL Football '84

Cinematronics
Space Ace '84*



Cinematronics
Dragon's Lair '83

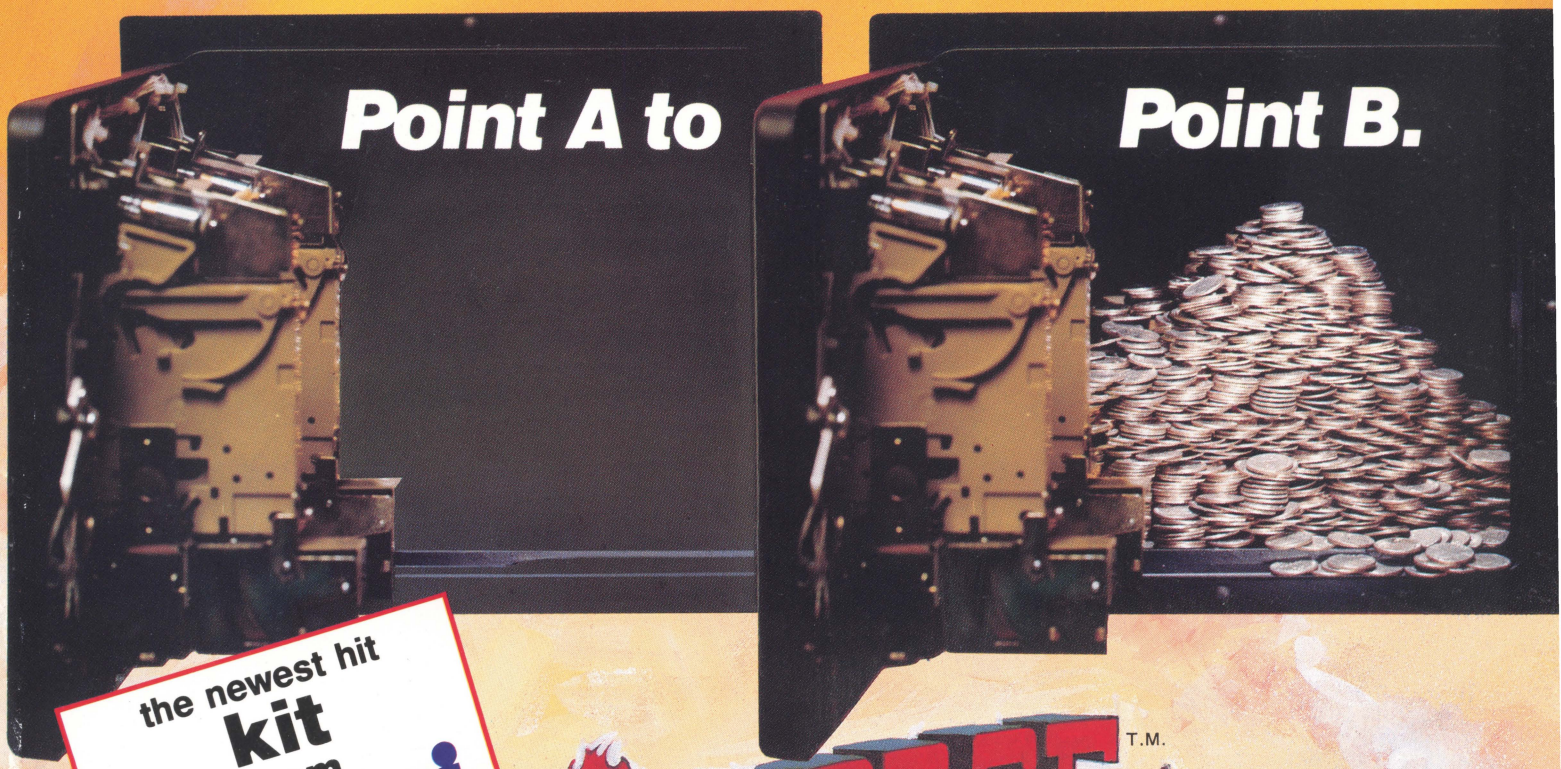
Data East USA
Cobra Command '84*



Data East USA
Bega's Battle '83

*conversion

The fastest way to get from



the newest hit kit from Konami®

IRON HORSE™

IRON HORSE is the only way to go when super-action, super-excitement and super-earnings are your goals! It's all aboard for daring and danger as the hero single-handedly must stave off bands of outlaws and varmints while saving the bags of gold. Triple scrolling and graphic engineering excellence in this Konami-quality kit create 3-D realism as the player, armed with pistol, whip or a strong-arm punch, tries to outwit and outmaneuver the bandits.

IRON HORSE. An on-track hit!

Konami Inc.

1555 Brummel Avenue, Elk Grove Village, IL 60007
Phone: 312/364-6633. Fax: 312/364-1368
Telex: 6871385 KONAM

Konami® is a trademark of Konami Industry Co., Ltd.®
IRON HORSE™ is a trademark of Konami Inc.
© 1986 Konami Inc. All rights reserved.

Konami® DISTRIBUTORS

ALABAMA
Birmingham Vending Co.
540-2nd Avenue North
Birmingham, AL 35204
(205) 324-7526

Franco Distributing Co., Inc.
1469 Jean Street
Montgomery, AL 36107
(205) 834-3455

ARIZONA
Bally Southwest
2300 N. Black Canyon
Phoenix, AZ 85009
(602) 233-0190

Mountain Coin Machine
2632 N. 37th Dr.
Phoenix, AZ 85009
(602) 269-7596

ARKANSAS
Godwin Distributing Co.
2024 West 38th Street
N. Little Rock, AR 72118
(501) 753-1138

CALIFORNIA
Bally Advance
540 Forbes Boulevard
So. San Francisco, CA 94080
(415) 871-4280

Betson Pacific
375 Oyster Point Boulevard
So. San Francisco, CA 94080
(415) 952-4220

C.A. Robinson Company
2891 West Pico Boulevard
Los Angeles, CA 90006
(213) 735-3001

COLORADO
Mountain Coin Machine
300 W. 53rd Place, Unit B
Denver, CO 80216
(303) 296-2060

Struve Distributing Co.
778 S. Santa Fe Dr.
Denver, CO 80223
(303) 778-7778

CONNECTICUT
Betson Enterprises
32 Higgins Drive
Milford, CT 06460
(203) 878-6966

FLORIDA
Monroe Distributing, Inc.
5350 State Rd. #84
Fort Lauderdale, FL 33314
(305) 584-4908

Sterling Coin Machine
165 Drennen Road
Orlando, FL 32806
(305) 851-8611

GEORGIA
Greater Southern Dist.
2164 Marietta Blvd. N.W.
Atlanta, GA 30318
(404) 352-3040

ILLINOIS
Atlas Distributing Inc.
2122 N. Western Ave.
Chicago, IL 60647
(312) 276-5005

INDIANA
Modern Vending Co.
7940 Pendelton Pike
Indianapolis, IN 46226
(317) 542-9207

IOWA
Mountain Coin Machine
751 E. Broadway
Des Moines, IA 50313
(515) 282-6211

Rowe Moss Distributing Co.
1726 Guthrie
Des Moines, IA 50316
(515) 266-5222

Moss Distributing Co.
2306 Dixon
Des Moines, IA 50316
(515) 266-7999

KANSAS
Bird Distributors, Inc.
1920 Fox Ridge Dr.
Kansas City, KS 66106
(913) 262-8440

Bird Distributors, Inc.
101 Poyntz Ave.
Manhattan, KS 66502
(913) 537-2930

United Distributors Co.
420 South Seneca Street
Wichita, KS 67213
(316) 263-6181

KENTUCKY
Kentucky Coin Machine Dist.
6005 Fern Valley Road
Louisville, KY 40228
(502) 966-5266

LOUISIANA
A.M.A. Dist., Inc.
1525 Airline Hwy.
Metairie, LA 70001
(504) 835-3232

New Orleans Novelty
3030 North Arnoult
Metairie, LA 70003
(504) 888-3500

MARYLAND
State Sales & Service Corp.
1825 Guilford Ave.
Baltimore, MD 21202
(301) 837-7177

MASSACHUSETTS
Bally Northeast Distributing
1400 P. Providence Hwy.
Norwood, MA 02062
(617) 762-9300

Rowe International Inc.
888 Rear Providence Hwy.
Dedham, MA 02026
(617) 329-3300

MICHIGAN
Atlas Distributing Inc.
732 Crofton S.E.
Grand Rapids, MI 49508
(616) 241-1472

Cartel Distributing
32433 Schoolcraft
Livonia, MI 48150
(313) 422-2111

MINNESOTA
Lieberman Music Company
9549 Penn Avenue South
Minneapolis, MN 55431
(612) 887-5300

MISSOURI
Audio Visual Amusement
1901 Delmar Blvd.
St. Louis, MO 63103
(314) 421-5100

NEBRASKA
Central Distributors Co.
3814 Farnam
Omaha, NE 68131
(402) 553-5300

NEVADA
Reno Games Sales
55 North Edison Way Unit 2
Reno, NV 89502
(702) 786-2002

NEW JERSEY
Betson Enterprises
6 Empire Blvd.
Moonachie, NJ 07074
(201) 440-2200

Mondial International Corp.
55 Fadem Road
Springfield, NJ 07081
(201) 467-9700

NEW MEXICO
Mountain Coin Dist.
2910 C. 4th St. N.W.
Alburquerque, NM 87107
(505) 345-7706

NEW YORK
Bay Coin Dist.
132-10 Jamaica Ave.
Richmond Hill, NY 11418
(718) 291-5757

Betson Enterprises
141 Lakeville Rd.
New Hyde Park, NY 11040
(516) 354-4647

NORTH CAROLINA
Brady Distributing Co.
4308 Wilmont Road
Charlotte, NC 28208
(704) 525-8130

OHIO
Cleveland Coin International
7029 Huntley Road
Columbus, OH 43229
(614) 846-8590

Cleveland Coin International
17000 S. Waterloo Road
Cleveland, OH 44110
(216) 692-0960

Monroe Distributing, Inc.
297 Northland Ave.
Cincinnati, OH 45246
(513) 771-1909

Monroe Distributing, Inc.
2999 Payne Ave.
Cleveland, OH 44114
(216) 781-4600

Shaffer Distributing Co.
1100 West 3rd Avenue
Columbus, OH 43212
(614) 224-6800

Shaffer Distributing Co.
7792 Capital Blvd.
Macedonia, OH 44056
(216) 467-4850

OKLAHOMA
Southwest Vending Sales
614 W. Sheridan
Oklahoma City, OK 73102
(405) 682-8612

OREGON
Dunis Distributing Company
1140 South East 7th Ave.
Portland, OR 97214
(503) 234-5491

PENNSYLVANIA
Active Amusement Co.
666 North Broad Street
Philadelphia, PA 19130
(215) 684-1600

Atlas Music Company
2231 5th Avenue
Pittsburgh, PA 15219
(412) 471-1704

Eastern Music Systems
500 North 12th Street
Philadelphia, PA 19123
(215) 627-1000

Roth Novelty Company
333 N. Pennsylvania Ave.
Wilkes-Barre, PA 18702
(717) 824-9994

TENNESSEE
Game Sales Co., Inc.
444 Monroe
Memphis, TN 38103
(901) 525-8351

Sammons Pennington
214 6th Ave. S.
Nashville, TN 37203
(615) 244-3020

TEXAS
Southwest Vending Sales
4520 Tejasco
San Antonio, TX 78210
(512) 824-9223

Southwest Vending Sales
2455 Irving Blvd.
Dallas, TX 75207-1006
(214) 638-7002

UTAH
Mountain Coin Machine Dist.
3753 S. State
Salt Lake City, UT 84115
(801) 262-5493

Struve Distributing Company
276 West 1st Street
Salt Lake City, UT 84101
(801) 328-1636

WASHINGTON
Music Vend Distributing Co.
1550-4th Avenue South
Seattle, WA 98124
(206) 682-5700

Music Vend Distributing Co.
East 4008 Broadway
Spokane, WA 99202
(509) 535-5757

WISCONSIN
Pioneer Sales & Service
N55 W13875 Oak Lane
Menomonee Falls, WI 53051
(414) 781-1420

PUERTO RICO
Land of Oz
Bairoa Shopping Center 2G2F
Caguas, Puerto Rico 00625
(809) 743-5566

CANADA
Laniel Sales
151 Rockland Road
Montreal, Quebec
Canada H3P 2W3
(514) 731-8571

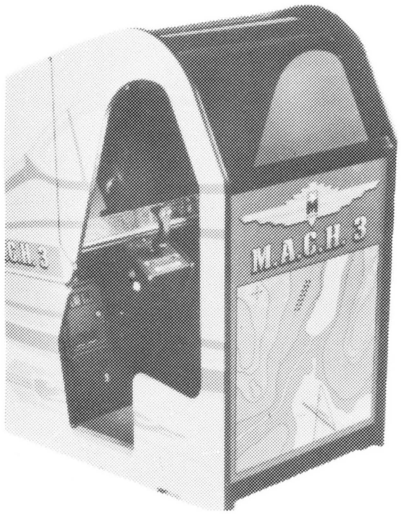
New Way Sales
2050 Kipling Avenue
Rexdale, Ontario
Canada M9W 5L6
(416) 746-2255

J.E. Weatherhead Dist. LTD
4318 Dawson Street
Burnaby, BC
Canada V5C 4B6
(604) 294-8271

Funai/ESP
Zangus '85
(laser disc conversion)

Funai/ESP
Interstellar '83

Mylstar
Us Vs. Them '84*



Mylstar
M.A.C.H. 3 '83

RDI
Thayers Quest '85**

Stern
Goal To Go '84*

Stern
Cliff Hanger '83

Tehkan, Inc.
Top Gear '85

Williams Electronics
Star Rider '84

---

*conversion **conversion for *Dragon's Lair* or *Space Ace*

Strong visuals always part of successful pins

by Roger C. Sharpe

When *Play Meter* suggested that I write a piece about pinball art, I welcomed the idea with open arms—and eyes. It was gratifying to discover that the magazine hadn't forgotten just how important graphics have always been to the coin-op industry.

What may be fascinating to some is that the advent of video did much to minimize the impact of graphics. After all, the header area was smaller, and the cabinet art tended to be more a reaffirmation that the machine ahead was the one the player was looking for. In the video-game era it was always the on-screen graphics and play action that ruled the day and received the most attention, whether it was the initial use of overlays to simulate a yellow or blue field, vector graphics that made linear action much more precise compared with raster renditions, or the movement to full four-color treatments such as Exidy's *Star Fire* for vector graphics and other pioneer efforts that set the stage for the ensuing full-scale assault.

This isn't to take away from any of the accomplishments of the late George Opperman of Atari or any of the other artistic wonders who plied their craft over the years, but, let's face it, visuals have always been an integral complement of pinballs. When I first became involved in the industry and talked about graphics, the common reply was that good artwork gets the first quarter, but a good game will get the rest. It was that simplistic and direct.

Even books on pinball that began appearing in 1976 didn't really make a study of the art or the style that had been so much a part of the evolution of the coin-op world. I'd like to think that my never-ending preoccupation with pinball art may have played some small role in turning attitudes around. I included a section on graphics when I started reviewing pinball machines in "Critic's Corner" back in 1976, and when my book, *Pinball!*, came out in 1977, it was nothing less than a celebration of the beauty of pinball as shown through the work of Jim Hamilton, who was able to capture so much on film.

I never wavered from my initial fascination with pinball art and its place in the history of the industry, because it really is the graphics that help shape the impressions of the public when it comes to pinball—even more so than the playfield on first glance. And, in the eyes of the outside world, it is the artwork on colorful backglasses that has ensured a unique place for pinballs when compared with other, more conventional, forms.

Probably the single most influential artist of the coin-op industry was the legendary Roy Parker, who labored for Advertising Poster when every manufacturer was using the company as its source for graphic works. Parker was the creative source behind many of Gottlieb's games in the late '40s and '50s. He lent his distinctive touch to such whimsical games as *Square Head* and others that managed to impart the feeling of a single panel from a cartoon strip—complete with all the touches and details that begged to be looked at closely for an extended time. There invariably was something to discover in the worlds he presented—a new twist or some other magical quality that placed Parker's work on a totally different plane.

Dave Christenson, a force at Bally in the '70s, probably summed up Roy Parker's singular abilities when he said that "since Roy Parker died, there hasn't been truly outstanding artwork on pinball machines. I think his paintings epitomized what pinball art *should* be. He drew girls who always looked like they'd stepped out of a 'Terry and the Pirates' episode. But when Roy Parker stopped painting, sexuality went out of pinball backglass art. The machines switched to kid stuff, like circus themes. I'm trying to change all that."

And Christenson, in many ways, did help change all that. In the mid-'70s he brought the world the likes of *Wizard, Air Aces, Capt. Fantastic, Mata Hari*, and so many other memorable machines noted more for their outstanding graphics than any single playfield feature or sound effect. Christenson was able to bring new life back into the world of pinball and, in the process, lead Bally up

In the eyes of the outside world, it is the artwork on colorful backglasses that has ensured a unique place for pinballs.

the ladder of success.

This isn't to minimize the playfield designs of Bally's machines of that era, but the quality of their look really did set Bally's pinballs apart from the rest. And, in much the same way as Parker, Christenson was able to set the tone for what followed in the evolution and refinement of graphics styling and theme execution.

In the 1960s, pinball art was extremely linear and proved to be a good parallel to the pop art that was coming from the more traditional sources such as Peter Max, Jasper Johns, Warhol, and others. In the 1970s, graphics tended to be more cartoonesque and infantile in subject matter and direction. The move to realism was fast approaching on the heels of this trend, and it didn't take long to find graphics offering scenes that were almost direct feeds from the outside world, whether it was the trucker world of *Night Rider* from Bally or *Space Mission* by Williams.

By this time pinball had gotten the attention of the real world, and the industry as a whole was experiencing its first real rise in the leisure-time entertainment field. Pinball led the way and set the stage for what would follow from its video-game cousin. And in looking at the publicity the industry received, it is easy to see that the games, first and foremost, were great to look at with their flashing lights, bright colors, and outstanding artwork.

Suddenly Advertising Poster wasn't alone in its servicing of pinball manufacturers. Bally opened up its

In the '60s, pinball art paralleled pop art.

doors to an in-house art facility better suited to big advertising agencies and graphics houses. Dave Christenson was joined by Paul Faris and a group of creative talents who were directly responsible for many of the successes Bally enjoyed for a number of years. Atari followed suit from its California headquarters when it brought a new body to pinball with *The Atarians* and a different graphic technique that introduced many new textures and tones long missing from the pinball art palette. Williams was next in line with Connie Mitchell (*Flash* was one of his opening forays) and other artists who helped shape Williams' resurgence in the marketplace.

Today the impact and importance of graphics are no less than they were before, even though times have changed. The companies supporting the pinball revival have reached into the pool of talents who still use the games as a showcase, as Seamus MacLaughlin did on my recent Game Plan piece, *Cyclopes*.

A story about the creation of *Sharpshooter* illustrates the premium I always have placed on pinball art. I remember putting George Molentin of Ad Poster through hell and back to deliver the graphic detail and execution I wanted. My vision of the west was to modify the landmark scene from "High Noon" in which Gary Cooper began his long, lonely walk down the streets of an old cowboy town. There was a quality I wanted that demanded colors that weren't all bright and dayglo

UAI NEW JERSEY, INC.

The Leader in

Super Crane
W–25¼"
D–34½"
H–81½"

Our single player version of the Triple Way Crane.

Prize Redemption Equipment.

2400 BELMAR BLVD. • WALL, N.J. • 07719
201·681·8900

677 S. MAGNOLIA AVE., EL CAJON, CA. 92020
619·440·5785

Q: WHEN DOES 1 + 1 EQUAL MORE THAN 2?

A: WHEN YOU DEAL WITH HANSON Dist. Co.

NOW 2 OFFICES
serving the
NORTH CENTRAL OPERATOR

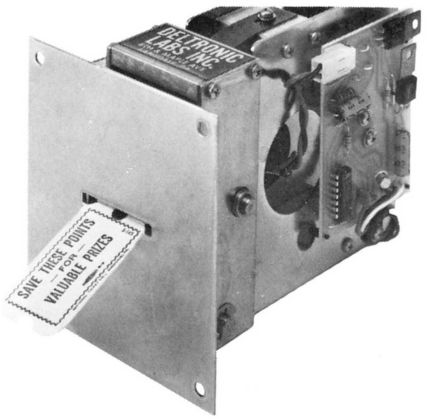
1 MICHIGAN:
HANSON Dist. Co.
36339 Groesbeck Hwy.
Mt. Clemens, MI 48403
313-792-7020

+

1 MINNESOTA:
HANSON Dist. Co.
9201 Penn Ave. S., #1
Bloomington, MN 55431
612-884-6604 (LOCAL)
800-352-2780 (MN ONLY)
800-328-2866 (OUT OF STATE)

= ★ ONLY THE BEST PRODUCT LINES!
★ FAST, RELIABLE SERVICE!
★ COMPLETE PARTS & ACCESSORIES!
★ KITS/CONVERSIONS!
★ TRADE-INS!
★ LEAGUE AND TOURNAMENT PROMOTIONS!
★ SEMINARS!

THE TICKET DISPENSER —WITH EXPERIENCE



DELTRONIC LABS DL-1275 Ticket Dispenser is now available in kits—for quick and easy installation on existing video, pinball and novelty games.

For more than 7 years, top amusement manufacturers have relied on DELTRONICS LABS for quality ticket dispensers, backed by prompt and efficient service.

Now this time-tested dispenser is incorporated in kits for the same dependable performance on your present games.

You can renew player interest with tickets for awards and bonuses—and keep them playing again and again and again!

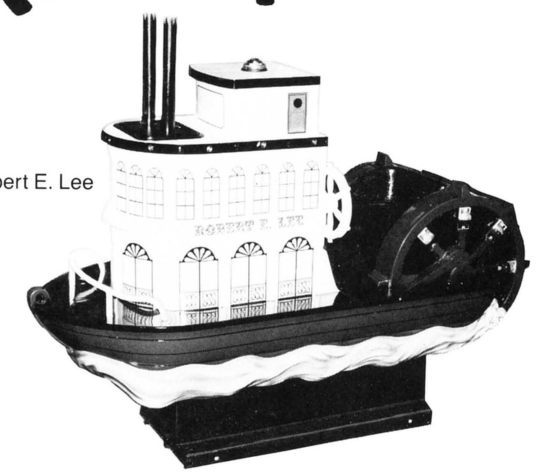
DELTRONIC LABS, INC.

Eight & Maple Avenue • Lansdale, PA 19446

215/362-9112 • Telex 317054

UAI NEW JERSEY, INC.

Kiddie Rides



Robert E. Lee

2400 BELMAR BLVD. • WALL, N.J. • 07719

201·681·8900

677 S. MAGNOLIA AVE., EL CAJON, CA. 92020

619·440·5785

powerful. The hues had to be browns and other tones that would fit in with the world I wanted to create. Remember, after all, that at the time *Sharpshooter* hit, the mood was one of space themes because of the success in films that "Star Wars" begat. I also didn't want the playfield to be a throw-away picking up a dominant image or character from the backglass and placing it down on the middle of the board.

In fact, I wanted to give *Sharpshooter* something different, visually, than had ever been before. Look at the playfield art and you may think that the gunfighter falling is the same fellow with the glasses and mustache on the backglass. But a closer look shows that the falling gunfighter really is another character who has just been shot. It is a continuation of the backglass setting from the perspective of someone way behind the action. That was the depth of field I wanted to bring to the graphics. Even the playfield plastics have images of men on horses or other subjects all pointed in perspective to the main tableau.

George had trouble getting what I had set out in my mind's eye. My stick-figure sketches didn't help much, nor, probably, did the Polaroid I sent him of myself dressed in western garb and poised with a gun so that he could have some point of reference upon which to base his efforts.

Clearly, the artwork was essential in the design of *Sharpshooter* and the package I wanted to pull together

Today the impact of graphics is no less than before.

so that the game was the best it could be. I went to the same lengths with *Cyclopes* in an effort to capture a vision I had inside my head but could not translate into a finished drawing that showed the detail and setting I wanted to bring to the game.

Recent games support the notion that graphics once again have taken a leading role in the creation and design of any pin game. It is almost as important as all the sound effects, bells, and whistles that many of the new games have. If you doubt it, just take a look at *High Speed* by Williams and the power of its theme, or *Rock* from Premier and its distinctive look that separates it from what might be considered a typical Premier piece.

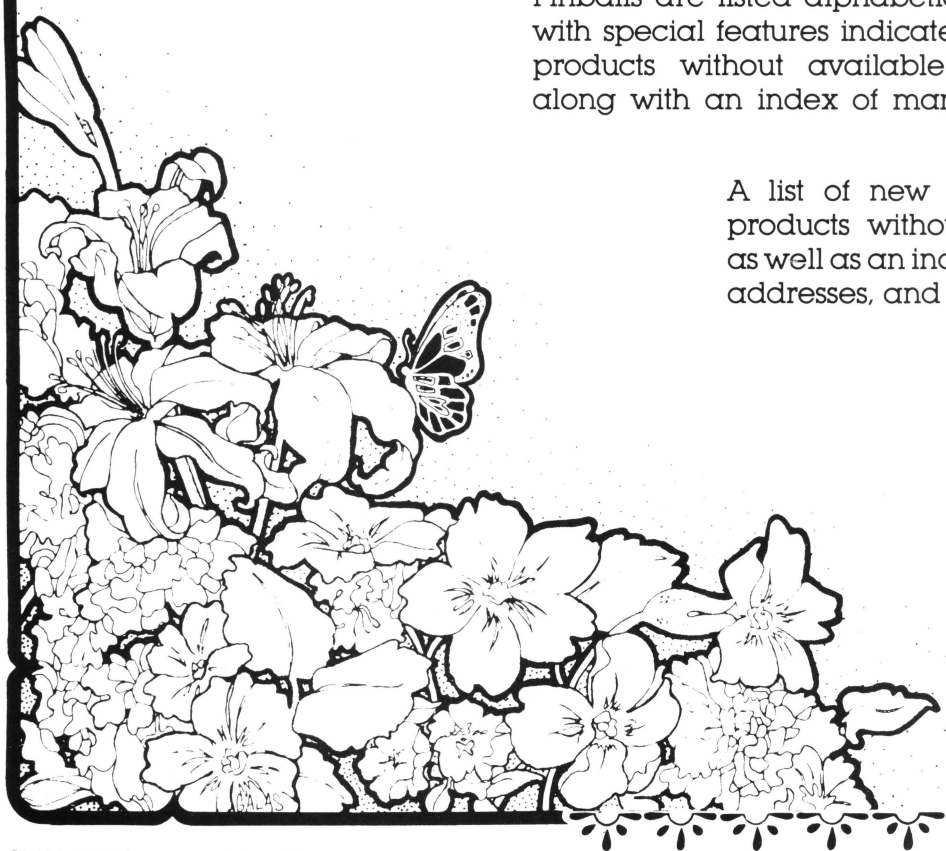
As always, pinball art will be an integral part of the games coming down the pike. Their styles will differ because of artistic tastes and the talents of the people working on sketches and screens to bring imagination and color to the world of the flipper machine. And so too will the subject matter change to suit the purpose of the task. Given the nature of the world, we'll probably be seeing more true-to-life creations that reflect goings-on outside the game room, but the one constant will be that pinball art will always have its own unique place in the history and legacy of this industry. From the time the first backglasses appeared on pin games back in the late '30s until now, the graphics have served as a testament to the events and changes we have endured from decade to decade and generation to generation. •

1986 Spring Buyers Guide

PINBALL GAMES

Pinballs are listed alphabetically by manufacturer, with special features indicated by footnote. A list of products without available photographs follows along with an index of manufacturer information.

A list of new products and existing products without photographs follow as well as an index of company names, addresses, and telephone numbers.



PINBALL GAMES

Bally Midway
Lady Luck '86

Bally Midway
Beat the Clock '85

Bally Midway
Cybernaut '85

Bally Midway
Eight Ball Champ '85

Bally Midway
Fireball Classic '85

Bally Midway
Black Pyramid '84

Bally Midway
Kings of Steel '84

Bally Midway
Spy Hunter '84

Bally Midway
X's & O's '84

Bally Midway
Goldball '83

Bally Midway
Grand Slam '83

Bally Midway
Eight Ball Deluxe '82

Bally Midway
Mr. & Mrs. Pac-Man '82*

Bally Midway
Rapid Fire '82**

Bally Midway
Speakeasy '82

*combines pinball and video

**pinball with gun mechanism that shoots balls

Bally Midway
Spectrum '82

Bally Midway
Vector '82

Game Plan
Cyclopes '85

Game Plan
Andromeda '85

Game Plan
Captain Hook '85

Game Plan
Lady Sharpshooter '85*

Game Plan
Agents 777 '84

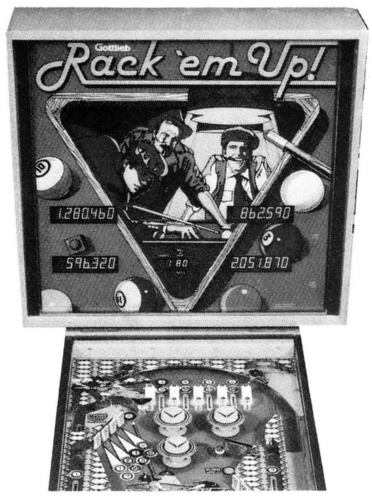
Game Plan
Attila the Hun '84

Game Plan
Sharpshooter II '83

*cocktail pin

Gottlieb
Amazon Hunt '84*

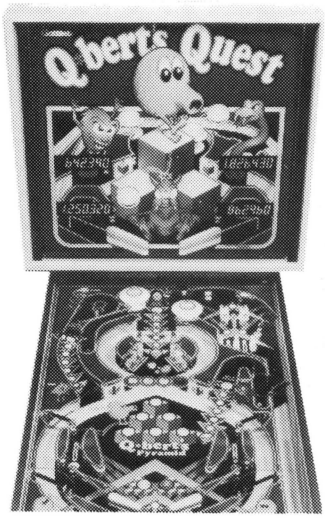
Gottlieb
Jacks to Open '84



Gottlieb
Rack 'em Up '84

Gottlieb
Ready-Aim-Fire '84

Gottlieb
The Games '84



Gottlieb
Q*bert's Quest '83

Gottlieb
Royal Flush Deluxe '83

Gottlieb
Striker '83

Gottlieb
Super Orbit '83

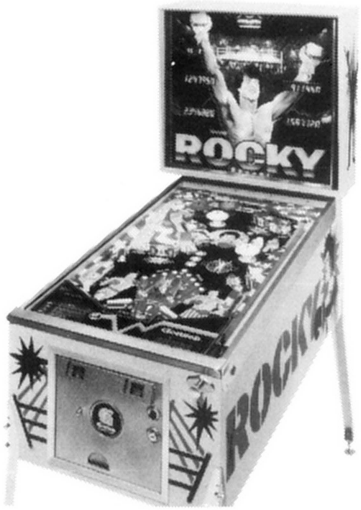
*Gottlieb or Mylstar pins can be serviced by Premier Technology

Gottlieb
Caveman '82

Gottlieb
Devil's Dare '82

Gottlieb
Haunted House '82

Gottlieb
Punk '82



Gottlieb
Rocky '82

Gottlieb
Spirit '82

Kitkorp
Gamatron '85*

Mylstar
Alien Star '85**

Premier Technology
Raven '86

*pinball conversion kit

**Gottlieb or Mylstar pins can be serviced by Premier Technology

Premier Technology
Bounty Hunter '85

Premier Technology
Chicago Cubs Triple Play '85

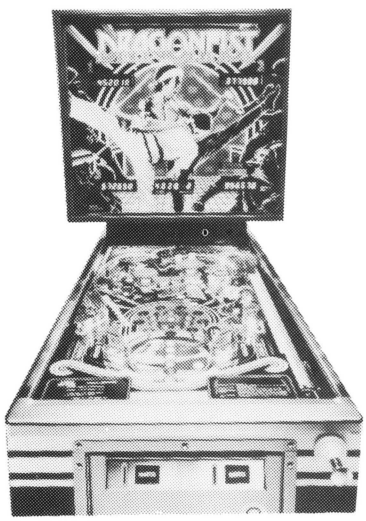
Premier Technology
El Dorado City of Gold '85

Premier Technology
Ice Fever '85

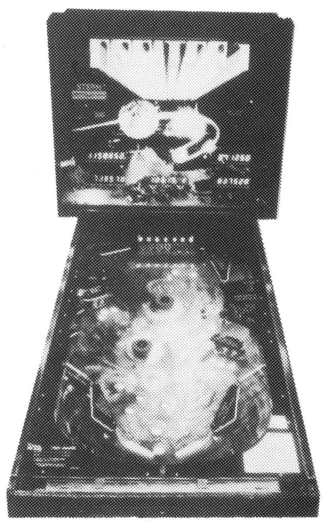
Premier Technology
Rock '85

Premier Technology
Tag Team Pinball '85

Premier Technology
Touchdown '85



Stern
Dragonfist '82



Stern
Orbitor I '82

Williams Electronics
Comet '85

Williams Electronics
Gridiron '85

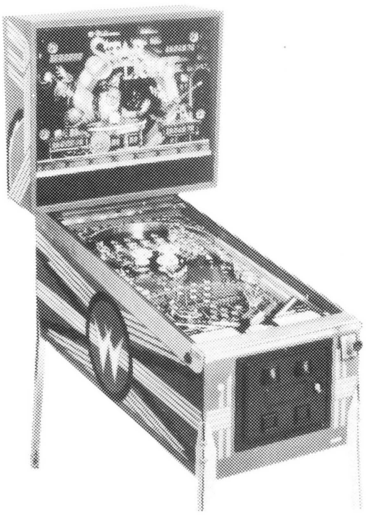
Williams Electronics
High Speed '85

Williams Electronics
Sorcerer '85

Williams Electronics
Space Shuttle '85

Williams Electronics
Laser Cue '84

Williams Electronics
Pennant Fever '84



Williams Electronics
Star Light '84

Williams Electronics
Defender '83

Williams Electronics
Firepower II '83

Williams Electronics
Joust '83*

Williams Electronics
Time Fantasy '83

Williams Electronics
Warlock '83

Williams Electronics
Cosmic Gunfight '82

Williams Electronics
Hyperball '82**

Zaccaria
Devil Riders '85

Zaccaria
Magic Castle '85

Zaccaria
Farfalla '84

*a dual-player pin with two sets of flippers; also an upright video
**pinball with video game features, including two trigger mechanisms

TUT! TUT!

Don't let your business Mummify!

Advertise in Play Meter

You'll resurrect your business and see your sales pyramid.

We even dug up the number for you.

(504) 488-7003

Zaccaria
Pinball Champ '83

Zaccaria
Soccer Kings '83

PINBALL GAMES

(photos not available)

Game Plan
Lock Ness Monster '86

Premier Technology
Rock Encore '86
(a "booster-pack" pinball conversion for *Rock*)

Wico Corporation
Af-tor '85

The most profitable private payphone system in the U.S. today!

ONLY CASHPHONE GIVES YOU THESE EXCLUSIVE FEATURES:

CONTINUOUS OPERATING INFORMATION . . . Each Cashphone is a microprocessor which records every cash and credit card transaction. The Cashphone can be programmed to call the owner at specific times or under specific cash conditions. As a result, your service costs are minimized, your operating efficiency is maximized!

CASHPHONE IS SAFE, SECURE . . . Latest electronic and metal technologies have been used to make each Cashphone resistant to tampering, theft and vandalism. From the 16-gauge front panel to the Medeco cash box security lock and every component in-between, Cashphone is the optimum in security protection.

INCREASED PROFIT OPPORTUNITIES . . . Cashphone has 16 speed-dial buttons to access a number of extra-profit calls to local area businesses and for user-interested information. For example, buttons can be programmed to reach hotel and motel information, florists and others. In addition, users may want their horoscopes, stock market quotations, weather reports and dozens of other desired pieces of information. Cashphone's ability to accept payment by major credit cards will add to these extra-profit opportunities!

READY NOW FOR IMMEDIATE DELIVERY

For more information call

1-800-524-0671

Cashphone™

A product of **Capital Tel Systems, Inc.**
389 Passaic Avenue, Fairfield, New Jersey 07006
(201) 882-1314

INDEX OF VIDEO AND PINBALL MANUFACTURERS

ATW
460 Wildwood Street
Woburn, MA 01841
(617) 933-5819

American Suntronics
(no longer in operation)

Amusement Technology
1200 Memorial Drive
Asbury Park, NJ 07712
(201) 774-3000
(800) 272-1371

Atari Games
675 Sycamore Drive
P.O. Box 361110
Milpitas, CA 95035
(408) 434-3700

Bally Midway
10601 W. Belmont Avenue
Franklin Park, IL 60131
(312) 451-9200
(800) 323-7182

Bally Sente
1289 Anvilwood Avenue
Sunnyvale, CA 94089
(408) 744-1414

Capcom USA
1283-C Mt. View - Alviso Road
Sunnyvale, CA 94089
(408) 745-7081

Cardinal Amusements
507 State Road
Auburn, AL 36830
(205) 826-7056

Centuri
(no longer in operation)

Centuri/Konami
(see Konami)

Cinematronics
1841 Friendship Drive
El Cajon, CA 92020
(619) 562-7000

Coin-It
4380 N.W. 72nd Avenue
Miami, FL 33166
(305) 593-5111

Coindata, Inc.
803 Vilage Hills Drive
Nashville, TN 37217
(615) 793-2423

Crown Vending
111-59 44th Avenue
P.O. Box 19
Corona, NY 11368
(718) 592-7070

Data East USA
470 Needles Drive
San Jose, CA 95112
(408) 286-7074

Destron
Contact: **Profitable Games, Inc.**
865 W. North Avenue
Chicago, IL 60622
(312) 943-1017

Digital Controls
5555 Oakbrook Parkway, #200
Norcross, GA 30093
(404) 441-3332

Eastern Micro
12D World's Fair Drive
Somerset, NJ 08873
(201) 469-9690

Enter-Tech
1724 W. 4th Street
Tempe, AZ 85281
(602) 968-7404

Entertainment Sciences
2318 S. Fairview Street
Santa Ana, CA 92704
(714) 556-5544

Exidy
390 Java Drive
Sunnyvale, CA 94089
(408) 734-9410

Funai/ESP, Inc.
3111 S. Valley View, Bldg. E120
Las Vegas, NV 89102
(702) 362-4402

Game-A-Tron Corp.
45 Osgood Avenue
New Britain, CT 06053
(203) 223-2760

Game Operators Corp.
1617 W. Harry
Wichita, KS 67213
(312) 267-7371

Game Plan, Inc.
1515 W. Fullerton
Addison, IL 60101
(312) 628-8200

Gottlieb
Contact Premier Technology for service on any Gottlieb pin.

Grayhound Electronics
Route 37 & Germania Station Road
Toms River, NJ 08753
(201) 341-5200
(800) 222-0491

Kitkorp
2250 Elmhurst Road
Elk Grove Village, IL 60007
(312) 228-0451

Konami
1555 Brummel Road
Elk Grove Village, IL 60007
(312) 364-6633

Magic Electronics
P.O. Box 10428
Cranston, RI 02910
(401) 331-2810

Memetron
2350 Brickvale Drive
Elk Grove Village, IL 60007
(312) 595-2828

Merit Industries
2525 State Road
P.O. Box 5004
Bensalem, PA 19020
(215) 639-4700
(800) 523-2760

Monroe Manufacturing
2999 Payne Avenue
Cleveland, OH 44114
(216) 781-4600

Mylstar
Contact Premier Technology for service on any Mylstar pin.

NSM-Lowen America, Inc.
5207 N. Rose Street
Chicago, IL 60656
(312) 992-2280

New Technology
14 Dayton Street, Box 37
Bernardsville, NJ 07924
(201) 953-9666

Nichibutsu USA
15737 Garfield Avenue, #18
Paramount, CA 90723
(213) 408-0515
Sales office:
10110 S.W. Nimbus B-2
Portland, OR 97223
(503) 639-7743

Nintendo of America
4820 150th Avenue., N.E.
P.O. Box 957
Redmond, WA 98052
(206) 882-2040
(800) 633-3236

Nova Games of Canada
180 Graveline
St. Laurent, Quebec H47 1R7
(514) 342-5990

Pacific Novelty
(no longer in operation)

Photar
(no current address available)

PGD, Inc.
(Progressive Game Distributing)
1985 Friendship Drive, Suite J
El Cajon, CA 92020
(619) 449-9010

Premier Technology
759 Industry Drive
Bensenville, IL 60106
(312) 350-0400

Remark Industries, Inc.
1650 Oak Street
Lakewood, NJ 08701
(201) 367-7000

Rock-Ola
313 S. Rohlwing
Addison, IL 60101
(312) 629-9200

Romstar
3043 Kashiwa Street
Torrance, CA 90505
(213) 539-2744

SMS Manufacturing
1000 Airport Road
Lakewood, NJ 08701
(201) 370-3030
(800) 221-0138

Samyra
(no current address available)

Sega Enterprises
2149 Paragon Drive
San Jose, CA 95131
(408) 435-0201

Sigma Enterprises
17-1 Shibuya-ku, 1-chome
Shibuya-ku/Tokyo 150, Japan
(03) 486-2891

Status Game Corp.
56 Budney Road
Newington, CT 06111
(203) 666-1960

Stern
(no longer in operation)

Sunn International
588 Douglas Avenue
Altamonte Springs, FL 32714
(305) 774-9636

Taito America
1256 Estes Avenue
Elk Grove Village, IL 60007
(312) 520-9280

Tehkan, Inc.
18010 Adria Maru Lane
Carson, CA 90746
(213) 329-5880

Trade West
P.O. Box 1796
Corsicana, TX 75110
(214) 874-2683

Thomas Automatics
Belton Road West
Loughborough, Leicestershire
England LE11OTR
Loughborough 267611

Tuni
(no longer in operation)

U.S. Billiards, Inc.
243 Dixon Avenue
Amityville, NY 11701
(516) 842-4242

Universal USA, Inc.
44350 Grimmer Blvd.
Fremont, CA 94539
(408) 727-4591

Venture Line, Inc.
3731 E. LaSalle
Phoenix, AZ 85040
(602) 437-1054

Wico
6400 W. Gross Point Road
Niles, IL 60648
(312) 647-7500
(800) 323-0765

Williams Electronics
3401 N. California Avenue
Chicago, IL 60618
(312) 267-2240

Zaccaria
Contact: **Bhuzac International**
384-A Foster City Blvd.
Foster City, CA 94404
(415) 341-5200

NATIONAL PLAY METER

Poll Information

The following are rankings of the top games in the coin-operated amusement industry. The games are ranked according to an index formulated from a regular survey of operators of coin-operated amusement equipment. Games not appearing on this poll either (1) did not generate a five percent response or (2) did not rank among the top 50 games in the country. The games are further identified by their general equipment classification type: Video, Pinball, and Novelty. The average index rating for all surveyed games for this individual survey was 77.

Top Ten Games of March 15 Issue

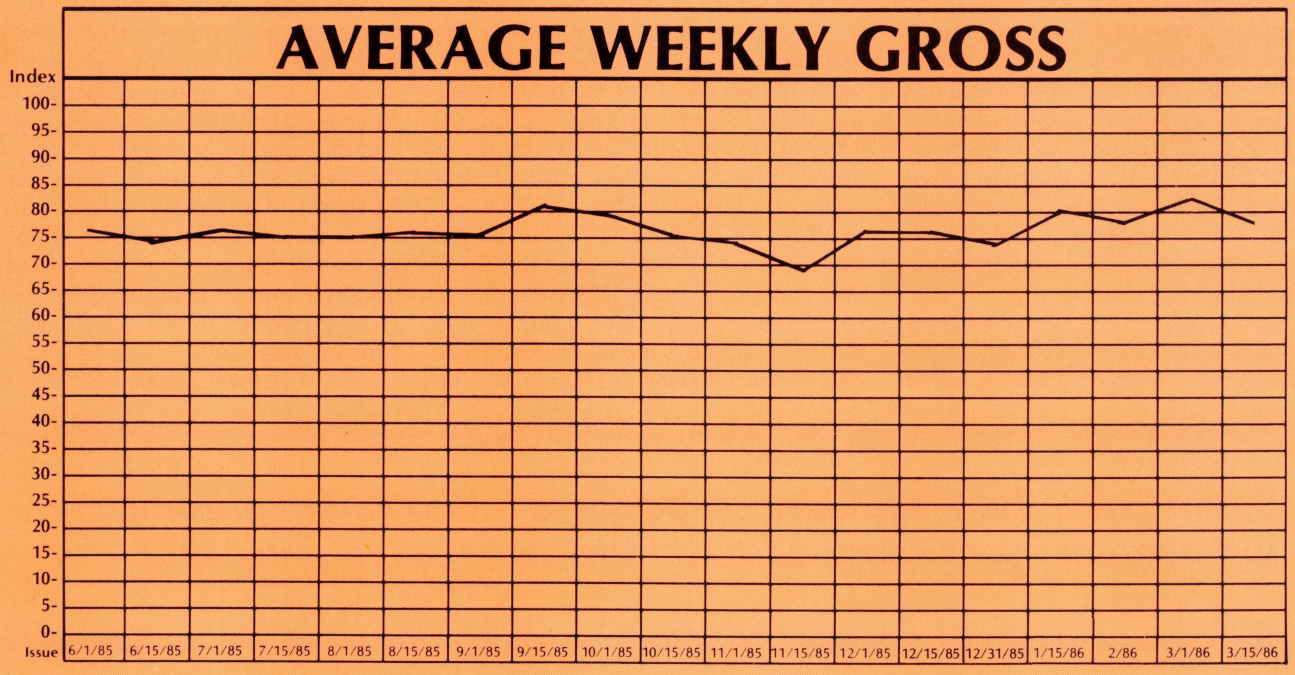
Game/Manufacturer	Index Rating	Game/Manufacturer	Index Rating
1. ***Gauntlet*/Atari**	**257**	6. ***World Series*/Cinematronics**	**129**
2. ***High Speed*/Williams**	**225**	6. ***Choplifter*/Sega**	**129**
3. ***Hang-On* (upright)/Sega**	**195**	8. ***Triple Strike*/Williams**	**127**
4. ***Mat Mania*/Memetron**	**134**	9. ***Comet*/Williams**	**126**
5. ***Rock*/Premier**	**133**	10. ***Paperboy*/Atari**	**125**

Game/Manufacturer	Mar. 15	Mar. 1	Feb.	Jan. 15	Video	Pinball	Novelty
1. *Gauntlet*/Atari	257	282	336	428	•		
2. *High Speed*/Williams	225	—	238	—		•	
3. *Hang-On (upright)*/Sega	195	162	244	217	•		
4. *Mat Mania*/Memetron	134	151	161	171	•		
5. *Rock*/Premier	133	86	95	—		•	
6. *World Series, The Season*/Cinematronics	129	—	—	—	•		
6. *Choplifter*/Sega	129	155	122	177	•		
8. *Triple Strike*/Williams	127	—	63	—			•
10. *Comet*/Williams	126	131	136	132		•	
10. *Paperboy*/Atari	125	131	124	145	•		
11. *Pac-Land*/Bally Midway	124	—	—	—	•		
12. *Ghosts 'N Goblins*/Digital	117	110	114	—	•		
13. *Cheyenne*/Exidy	113	136	70	114	•		
14. *Triv Quiz 3*/Status	112	144	70	—	•		
15. *Commando*/Data East	111	124	92	124	•		
15. *Ring King*/Data East	111	93	85	163	•		
17. *Temple of Doom*/Atari	110	150	147	136	•		
18. *Fireball*/Bally Midway	109	55	60	86		•	
19. *Rush 'N Attack*/Konami	98	106	83	113	•		
20. *Tiger Heli*/Romstar	96	—	—	—	•		
21. *Kung Fu Master*/Data East	94	98	77	85	•		
21. *Mini Golf*/Bally Sente	94	115	163	160	•		
23. *Spy Hunter*/Bally Midway	92	96	106	105	•		
24. *Space Shuttle*/Williams	91	91	106	90		•	
24. *Eight Ball Champ*/Bally Midway	91	86	72	80		•	

NOTICE: The sole purpose of this survey is to determine on a regular basis the top performing games in the country. Any attempt to use the results of this survey for any other purpose is unauthorized, wrongful, and misleading.

NATIONAL PLAY METER

Game/Manufacturer	Mar. 15	Mar. 1.	Feb.	Jan. 15	Video	Pinball	Novelty
26. *Shootout*/Data East	90	122	69	—	•		
27. *Demolition Derby*/Bally Midway	88	91	126	123	•		
27. *Magmax*/Nichibutsu	88	81	63	74	•		
27. *1942*/Romstar	88	107	88	94	•		
27. *Stocker*/Bally Sente	88	—	179	—	•		
31. *Sex Trivia*/Merit	87	74	103	104	•		
32. *Sorcerer*/Williams	86	79	119	113		•	
32. *Bounty Hunter*/Premier	86	—	49	—		•	
34. *Cybernaut*/Bally Midway	81	—	—	—		•	
42. *Shanghai Kid*/Memetron	80	73	63	83	•		
42. *Tag Team Pinball*/Premier	79	—	—	—		•	
36. *Gunsmoke*/Romstar	79	122	100	163	•		
38. *Shoot Away*/Namco	78	—	—	—			•
39. *Special Forces*/Magic	77	53	35	40	•		
40. *Strike Zone*/Williams	76	75	74	—			•
41. *Galaga 3*/Bally Midway	74	89	59	85	•		
41. *Crackshot*/Exidy	74	—	131	—	•		
43. *Trivia Whiz II*/Merit	73	51	80	84	•		
44. *Return of the Jedi*/Atari	72	70	39	63	•		
44. *Dragon's Lair*/Cinematronics	72	76	39	56	•		
44. *T.N.K. III*/Kitkorp	72	138	—	79	•		
47. *Crossbow*/Exidy	71	—	42	85	•		
48. *Eight Ball Deluxe*/Bally Midway	70	79	79	71		•	
49. *Pole Position II*/Atari	69	89	76	93	•		
50. *Yie Ar Kung Fu*/Konami	67	78	52	73	•		



IMA show boasts little new

by David Snook

The organizers of the AMOA show and of London's ATEI might quibble a little with some of the claims of Heckmann GmbH, the professional organizers of the West German IMA show, because Heckmann has referred to its event as the largest such show in the world.

It wasn't, of course, falling way short of AMOA, let alone ATEI, but for all that IMA was a well organized event in a superb venue—the Frankfurt Messegande—and attracted 12,600 visitors.

The show was the seventh to be promoted by the VDAI (Verband Deutschen Automaten-Industrie e.V.), the German trade association, and was opened January 23 by Martin Gruner, Parliamentary Secretary of State in the German Federal Ministry for Trade and Industry.

Having got those weighty credits out of the way, the show can be summed up as having underlined once again the turnaround in the fortunes of the international coin-machine industry. One hundred and twelve exhibitors from eight countries displayed equipment in 12,000 square yards of space.

Naturally the West German heavyweights such as the Gauselmann group, Nova Apparate, Bally Wulff, and NSM Lowen dominated the show with impressive booths.

Statistically, the West German business is buoyant at present, with a turnover last year of DM2.75 billion (about $1.15 billion) reported to be the trade's best results since 1981. The Federal Republic accepted 80,300 new machines last year, slightly more than 1984's 80,050, and those figures include all kinds of coin-operated machines—video games, novelties, pinballs, jukeboxes, pool tables, etc. There was, however, a significant reduction in the number of video games sold, 7,100 compared with 10,700 in '84.

West Germany's 384,360 pieces of equipment of all kinds in operation break down as follows: 274,540 automatic amusement machines (modest slot machines); 49,000 video games; 69,540 jukeboxes; 55,000 pinball machines; and 40,280 sport-related games such as pool tables and foosball. The locations for the equipment also provide interesting statistics, with 286,000 pieces in pubs, hotels, and other street locations; 96,000 in arcades; and 1,500 in other locations.

The most notable change in the statistics, apart from the downfall in video-games numbers, is a big increase in pinball. Compared with 1984, 3,500 more are in operation, due no doubt to the setting up of a manufacturing facility by Bally Wulff.

For all the facts and figures pumped out by the organizers, there was not a lot to see at IMA that visitors to AMOA, Tokyo, and London had not seen already. It was the peculiarities of the German market itself that dominated. There were the peculiar West German slots, wall-mounted machines looking for all the world more like cigarette machines than slots, but the Germans like them that way. There was also the German peculiarity about "violent" games.

Buggy Boy, *Gauntlet*, and *Hang-On* may well have been the most popular games anyway, but they had less competition in Frankfurt because video games with warlike or violent themes are taboo. Four years ago, in response to intense media pressure, the VDAI introduced a voluntary machine self-regulation system that is a lengthy and somewhat unintelligible series of words in German better abbreviated to ASK.

It effectively forbids games with violent themes and promotes and encourages sports and amusing games, so it welcomed with open arms the advent of trivia games.

To begin with the pinball section, there can be no doubt that the show was stolen by one of the very few debutante machines, Williams' *High Speed*. It signified a movement toward games requiring mental and physical dexterity, and sports-oriented games. Its theme of a chase around a U.S. city street was attractive and exciting and enticed a stream of visitors to line up continuously to play the game at the Nova Apparate booth, which also featured *Comet*.

NSM Lowen featured Premier

Statistically, the West German business is buoyant at present, with turnover last year reported to be the best results since 1981.

Technology's *Rock*, but the talk was all of *Raven*, Premier's next pinball, which was reported near completion and was expected to be launched for the first time at a forthcoming British regional show. Zaccaria, the Italian manufacturer, showed *Pool Champion* while their competitors, Juegos Populares, featured *Halley's Comet* and *Aqualand*, models of which the Spanish company already had built around 10,000 for the Spanish market. Bally Wulff featured *Eight Ball Champ*, from the Bally-Midway stable and built in its Berlin factory, and a pinball of its own design, *Beat the Clock*.

The video-games section held few surprises, with Atari's *Gauntlet* heading the dedicated games followed by Sega's *Hang-On* in ride-on version and the same game in its cockpit and upright varieties. Atari's *Indiana Jones* and *Paperboy* followed, and Nintendo's *Hogan's Alley* also featured strongly. Top games in board form were *Tiger Heli*, Capcom's *Ghosts 'N Goblins*, Konami's *Green Beret*, Sega's *Choplifter*, and in the limited field of laser games, *Don Quixote* currently leads the field.

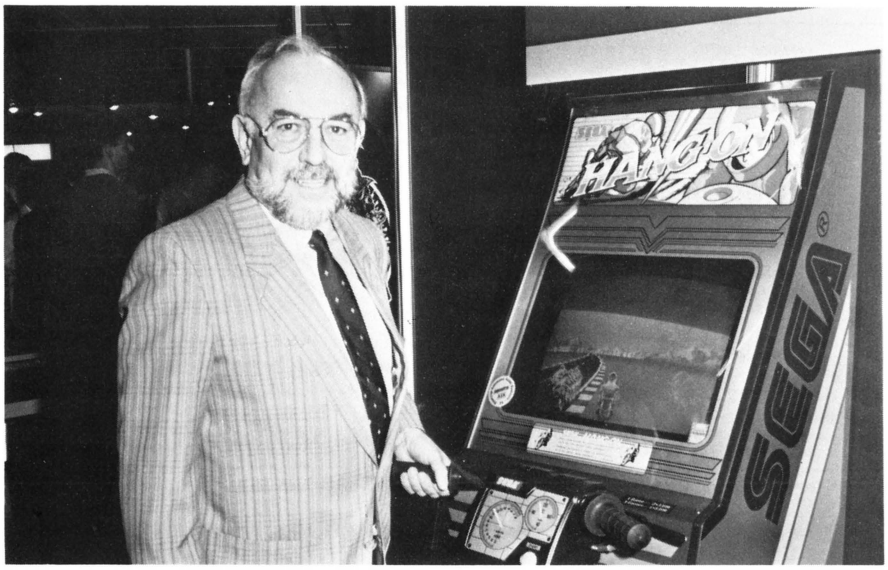
Sega's *Space Harrier* was shown for the first time, and it was a debut for a "game on legs," as the Europeans call simulators.

Nintendo's VS. series did well, and Bally's *Stompin'* was another newcomer to prove popular. Other new games the pundits suggested might perform well were Konami's *Iron Horse* and *Jail Break*, while Data East's *Express Raider* also is tipped.

It should be remembered, however, that West Germany's video-games market should be viewed circumspectly, for it peaked at 297,000 in 1980 and fell to 61,300 by 1984. The slump continued down to 49,000 last year. The decline is likely to continue.

Trivia, however, might give video games something of a boost provided their statistics are lumped in with more traditional video games. Status Games, Merit Industries, and the British-built Coinmaster games appeared to be the front-runners in the trivia field.

The decline in jukebox sales appears to have been halted in West Germany, even though the 69,540 sited in 1985 were fewer than 1984's 73,540. Sales in 1985 increased by just 50, but that was enough for manufac-



Hans Rosenzweig, managing director of the German distributor Nova Apparate, shows Sega's new mini-upright cabinet for Hang-On.

Premier Technology's Gil Pollock, right, and Belgian distributor Jan van de Velde pose with Rock *at the NSM Lowen booth, but more visitors were waiting for the arrival of* Raven, *Premier's new game.*

Data East's European head of sales Jim Pryde, left, and Dieter Weber of Swiss-based Novomat look over the new Data East game, Express Raider.

TOKENS

MINIMUM CUSTOM ORDER IS 1000 TOKENS.

HOFFMAN & HOFFMAN TOKENS ARE MINTED UNDER THE MOST RIGID QUALITY CONTROL STANDARDS WE MATCH OLD WORLD CRAFTSMANSHIP WITH ADVANCED TECHNOLOGY **HOFFMAN & HOFFMAN** HAS THE BEST PRICES, FASTEST DELIVERY AND HIGHEST QUALITY TOKENS IN THE NATION **YOU CAN BUY THE BEST TOKENS FOR LESS!** ***CHECK OUR PRICES AND SEE!***

CUSTOM TOKENS SHIPPED IN 10 DAYS

HOFFMAN & HOFFMAN
P.O. BOX 896, CARMEL, CA 93921
800-227-5813
IN CA 800-227-5814

ANNOUNCING:

ROMSTAR HAS MADE

AVAILABLE IN A UNIVERSIAL CONVERSION KIT

IT'S THE KIT OPERATORS ARE TALKING ABOUT

THE BEST CONVERSION KIT IN MY ARCADE!

DAVE PECK • FAMILY AMUSEMENT • LOS ANGELES, CALIFORNIA

THERE HAS BEEN NO BETTER GAME IN MY BOWLING ALLEY!

CRAIG JOHNSON • TATAKA AMUSEMENT • FARMINGTON, UTAH

IS AVAILABLE EXCLUSIVELY THROUGH ROMSTAR DISTRIBUTORS

ROMSTAR

3043 KASHIWA STREET • TORRANCE, CA 90505
(213) 539-2744 • Telex: 18246 • FAX: (213) 539-3626

turers like NSM and Wurlitzer to take heart, the former company featuring its classic range of *Satellite 200, City II, Prestige II,*and *Concert 240* plus its new consulette line. Wurlitzer featured the *SL800 Tarock*, the *Fuego*, and the Lasergraph, which was a combination of a changer mechanism, a laserdisc storage for 15 discs, and a LaserVision player unit. Rowe Ami's video jukebox made an impressive showing in the booth of distributor S. and F. Automaten GmbH. The unit consisted of a video screen added to an *R90* jukebox.

But IMA is more than coin-operated music and amusement machines. About 40 percent of its floor area each year is taken up with vending machines. The four Cs—cigarettes, cold drinks, coffee, and candy—make up the vast majority of West German vending.

There are approximately 750,000 cigarette machines in Germany, of which 51 percent are well-mounted mechanical models for outdoor locations and the remainder are indoor versions of great elegance from carved wood and veneered oak. About 1,500 tobacco wholesalers operate the machines and in 1985 sold 40.4 percent of all cigarettes consumed in West Germany, a slight decrease compared with 1984's figures. Despite a price increase in September 1985, German cigarette consumption remained fairly constant at 141 billion cigarettes.

Sales of cigarette-vending machines has been far less stable, with constant decreases since 1981. The 1985 figure dropped by 19 percent, and the market in total has fallen 39 percent since 1981.

The hot-drinks business, however, has been very good, with 45,000 drink dispensers located in factories, offices, and institutions. Of these, more than 30,000 are freeze-dried units and about 12,000 fresh-brew models. The machines sell 650 million cups of coffee a year.

There are about 150,000 cold-drink venders. Candy and food vending are part of industrial catering, and the number of glass-front and drum venders is growing disproportionately. Nevertheless, the 10,000 to 15,000 machines on location are few compared with North America.

And that sums up IMA, short of debut equipment but long on statistics—and claims to lead the world. •

FRANK'S CRANKS

By Frank "The Crank" Seninsky

New games eagerly awaited

The ACME show is only two weeks away as I write, and I seriously can't wait to see what games are going to carry us through the next six months. I've written before that I've been very happy with some of the dedicated games of the past few months. Street operators have told me that a kit like *Mat Mania* has been keeping them going for these past several weeks. I know that Data East's *Ring King* two-player kit and Romstar's *Ghosts 'N Goblins* kit will be smash hits. Watch out for Sega! Their *Space Harrier*, *Major League*, and *Shooting Master* could be the games we are looking for.

More on *Choplifter*—Many operators probably aren't aware that although *Choplifter* is "composite negative sync," it also can hook right up to a "positive composite-sync" monitor with just two simple modifications. There are still many positive-sync monitors around. Sega has provided a built-in loop circuit so you don't have to install a 74LS04. IC48 (on the PC board) just happens to be one. Here is how easy it is.

Take the *Choplifter* PC board and position it in front of you (component side up) so the edge connector is facing you. On the left edge of the board you will see letters A through Y. On the top edge of the board you will see numbers 1 through 9. Locate position S-3. There will be three jumper pads, each resembling two semicircles, positioned together to form a circle. These jumper pads, as they are called, are just to the right of reference point IC48.

Let's refer to these pads as follows: #1—closest to you, #2—the middle pad, and #3—the pad farthest away from you. Step A: Cut the trace connection between the two semicircles on Pad #2. Step B: Join the two semicircles together with a drop of solder on pad #3. That's all there is to it. Now you can hook your positive-sync monitor up to the PCB negative composite-sync connection (solder side-pin Y on the 44-pin edge connector). Just make sure you've followed these steps or you could damage the board seriously. You may call technician Dave Cantrelle of Sega at (408) 435-0201 to double check. He'll be glad to help you.

Also note on *Choplifter* that there are two grounds at the end of the 44-pin connector. Pin 22 (gray/black) is the "sync ground." The black ground, pin Z, is not to be used to hook up to a monitor-sync connection. *Do not connect or use this black ground wire.* I don't even know why it's there. Don't even consider experimenting with this regular ground, as I know some already have done.

Hang-On—The lock-up problem I wrote about, which is corrected by shutting the game off and then turning it back on, has been diagnosed as a static-electricity buildup problem. To help avoid this problem, make sure the two 68000 microprocessors on the top board don't loosen up from vibration. This can cause more than just lock-up problems.

Sega wrenches—Sega has shipped to their distributors five-millimeter wrenches in screwdriver form for Sega's special M-5 tamper-proof screws. They are called M-5 drivers or T-25 drivers (in Japan). These wrenches will save time when you work on *Hang-On*.

If you are wondering why I've written so much on Sega games, it's not only because their games are worthy of such attention, but because Frank Rothauser of Sega has taken the time to call me and make sure operators are kept informed about Sega service tips. I wish other manufacturers would care as much. Let's face it, distributors just don't send out service bulletins to all their customers. Why is it that the manufacturers always look surprised when I say, "Gee, I didn't know about that service bulletin."

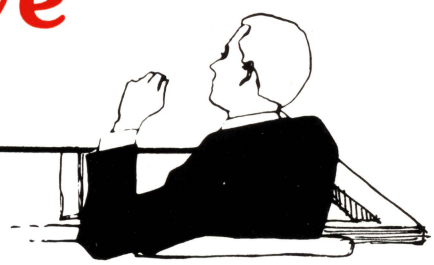
Improve the colors on *Mat Mania*—One of the best service tips I've seen recently comes from John Repici of Active Amusements in Philadelphia. John noticed that when he put a *Mat Mania* kit into a game that had an "old-style Wells-Gardner" monitor, the lighter colors besides the red, green, and blue were almost white.

To bring back the colors, John added a 0.1-microfarad (0.1 mfd) capacitor into each of the three main video-color lines (red, green, and blue). Make sure the positive end of the cap is facing the PC board and the negative end is facing the monitor connector. The addition of these capacitors also should help improve the colors on other games with older-style monitors. Note that you should degause the monitor before doing the modification, just to see if degausing improves the colors enough.

I'll be snooping around at the ACME show looking for interesting innovations. Got anything that you'd like to share? Drop me a note at Alpha-Omega Amusements & Sales, 6 Sutton Pl., Edison, NJ 08837, (201) 287-4990.

As always, keep cranking. •

How persuasive are you?



by Joseph Arkin

Volumes have been written by industrial psychologists on how to motivate workers, but all their findings can be boiled down to this: To get results you must give directions that are understood. You must make requests clearly and persuasively.

Whether managers should use rewards, threats, or Freudian psychology to persuade employees is the crux of the problem.

Here is a true-false quiz (compiled by the American Oil Company) that will help you see how your means of persuasion compare with those of experts on motivation. Check your answers against those provided to see how you measure up.

True or false?

1. If you want employees to work harder, set impossible deadlines.
2. Let employees try their own ways of doing jobs.
3. If you pay employees more money, they'll work harder.
4. Expect employees to do only what they're told, and they'll succeed.
5. After you give instructions, ask employees to repeat them.
6. Tell your employees the firm is dying, and they'll work harder.
7. Don't watch employees work, and they'll work faster.
8. You should motivate your employees to take a course or pursue reading to further their education.
9. When employees have a problem, let them handle it themselves.
10. If you want employees to do you a big favor, remind them of all you've done for them.

Answers

1. False. Employees can't do the impossible. This may not bother you as long as they're working at top speed, but if they know they're doomed to fail, why should they knock themselves out trying?

2. True. Going by the book may work for you, but there's always the chance innovative approaches you never thought of will work just as well. And if they don't, your employees will be highly motivated to do it your way because you let them try it their way first.

3. False. According to motivational experts, studies of employer-employee relationships show that salary ranks only fourth on a list of what motivates employees. Studies show employees would "get the lead out" faster if company policy and administration, kind of supervision, and working conditions were improved first.

4. False. Employees motivated by the desire to get ahead will do more than they're told. Let them offer suggestions, ask questions, and take on added responsibilities.

5. True. When you give employees time to explain exactly what they understand, you'll help them realize what they don't. Don't ask simply, "Do you understand?" No one wants to answer "no," and who can work confidently not knowing what he's doing?

6. True. No one wants to listen to prophecies of doom, but the fear of unemployment motivates employees to work to keep the firm from going under.

7. True. When there's someone constantly looking over your shoulder, you tend to concentrate on that rather than the job you're doing. Give employees room to work, and they'll give their work more attention.

8. True. Reluctant employees can be persuaded to study and add to their working knowledge if you provide the means, such as trade journals and books, tuition and expenses for educational seminars, or part of the cost of attending an educational institution.

9. True. If you solve their problems, your employees may be grateful, but they won't be motivated to find their own solutions in the future. In fact, your continual help may undermine their self-confidence. Let your employees find their own answers as often as possible.

10. False. No one likes to get a past-due notice for repayment of debt. But a favor properly worked can make an employee feel needed. If you honestly admit you want help, you're more likely not to be turned down.

Scoring

10 correct: No one can refuse you; you're a born diplomat.

7-9 correct: When you say "please," objections usually tumble.

5-6 correct: Your methods of persuasion need improving.

0-4 correct: You may not be able to motivate someone to cash a winning lottery ticket. •

PHRAZE CRAZE™

HAS HIT!!!

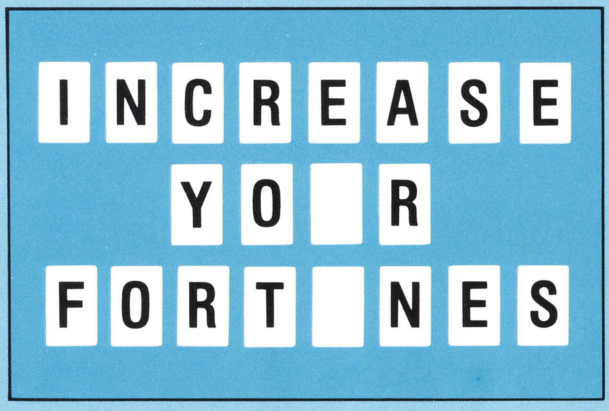
TV's HOTTEST GAME THEME— DONE THE MERIT WAY

GREAT GRAPHICS, PLAY APPEAL & STAYING POWER.

1 or 2 PLAYERS
25¢/50¢

MEGABYTE MEMORY
CONTAINS OVER
20,000 PHRASES

NO REPLACEMENT CHIPS NEEDED



- REVEAL OR CONCEAL ANSWERS
- SUSPENSEFUL SCORE WHEEL
- TOP 10 SCORERS DISPLAY
- FULL BOOKKEEPING FEATURES

THE ONLY THING MISSING IS "U"

...and PHRAZE CRAZE™ in your locations.

AVAILABLE IN UPRIGHTS, CABARETS COCKTAIL TABLES COUNTERTOPS & KITS

GET IT NOW!

Toll Free **800-523-2760**
In PA **215-639-4700**

Merit Industries 1986

merit industries inc. 2525 State Road, Bensalem, PA 19020

Billboard©

TOP TEN

Adult Contemporary

TITLE	ARTIST Label & Number/Distributing Label
1. SARA	STARSHIP GRUNT 14253/RCA
2. LIFE IN A NORTHERN TOWN	THE DREAM ACADEMY WARNER BROS. 7-28841
3. THESE DREAMS	HEART CAPITOL 5541
4. WHEN THE GOING GETS TOUGH (JEWEL OF THE NILE THEME)	BILLY OCEAN JIVE 1-9432/ARISTA
5. HOW WILL I KNOW	WHITNEY HOUSTON ARISTA 1-9434
6. NIKITA	ELTON JOHN GEFFEN 7-28873/WARNER BROS.
7. THE SWEETEST TABOO	SADE PORTRAIT 37-05713/EPIC
8. SECRET LOVERS	ATLANTIC STARR A&M 2788
9. SOMEWHERE (FROM 'WEST SIDE STORY')	BARBRA STREISAND COLUMBIA 38-05680
10. ONLY ONE	JAMES TAYLOR COLUMBIA 38-05785

Country

TITLE	ARTIST Label & Number/Distributing Label
1. YOU CAN DREAM OF ME	STEVE WARINER MCA 52721
2. THINK ABOUT LOVE	DOLLY PARTON RCA 14218
3. THE ONE I LOVED BACK THEN (THE CORVETTE SONG)	GEORGE JONES EPIC 34-05698
4. I COULD GET USED TO YOU	EXILE EPIC 34-05723
5. FAST LANES & COUNTRY ROADS	BARBARA MANDRELL MCA 52737
6. WHAT'S A MEMORY LIKE YOU (DOING IN A LOVE LIKE THIS)	JOHN SCHNEIDER MCA 52723
7. PLEASE BE LOVE	MARK GRAY COLUMBIA 38-05695
8. YOU SHOULD HAVE BEEN GONE BY NOW	EDDY RAVEN RCA 14250
9. OKLAHOMA BORDERLINE	VINCE GILL RCA 14216
10. DON'T UNDERESTIMATE MY LOVE FOR YOU	LEE GREENWOOD MCA 52741

Copyright 1986 by Billboard Publications, Inc.
Compiled by the Billboard Research Department
and reprinted with permission.

Dance Disco

TITLE	ARTIST Label & Number/Distributing Label
1. IF YOU SHOULD EVER BE LONELY (REMIX)	VAL YOUNG GORDY 4557GG/MOTOWN
2. COLONEL ABRAMS (LP CUTS)	COLONEL ABRAMS MCA MCA5682
3. HOW WILL I KNOW (REMIX)	WHITNEY HOUSTON ARISTA AD1-9449
4. LOSE YOUR LOVE/AVE MARIA	BLANCMANGE SIRE 0-20412/WARNER BROS.
5. HOW TO BE A ZILLIONAIRE (REMIX)/TOWER OF LONDON	ABC MERCURY 884 382-1/POLYGRAM
6. LIVING IN AMERICA	JAMES BROWN SCOTTI BROS. 429-05310/EPIC
7. CHAIN REACTION (REMIX)	DIANA ROSS RCA PD-14267
8. NEW TOY	THE FLIRTS CBS ASSOCIATED 429-05334/EPIC
9. I CAN'T WAIT	NU SHOOZ ATLANTIC 0-86828
10. THE SUN ALWAYS SHINES ON TV (REMIX)	A-HA WARNER BROS. 0-20410

Hot 100

TITLE	ARTIST Label & Number/Distributing Label
1. KYRIE	MR. MISTER RCA 14258
2. HOW WILL I KNOW	WHITNEY HOUSTON ARISTA 1-9434
3. SARA	STARSHIP GRUNT 14253/RCA
4. LIVING IN AMERICA	JAMES BROWN SCOTTI BROS. 4-05682/EPIC
5. THE SWEETEST TABOO	SADE PORTRAIT 37-05713/EPIC
6. WHEN THE GOING GETS TOUGH (JEWEL OF THE NILE THEME)	BILLY OCEAN JIVE 1-9432/ARISTA
7. LIFE IN A NORTHERN TOWN	THE DREAM ACADEMY WARNER BROS. 7-28841
8. SILENT RUNNING	MIKE & THE MECHANICS ATLANTIC 7-89488
9. SECRET LOVERS	ATLANTIC STARR A&M 2788
10. THESE DREAMS	HEART CAPITOL 5541

VALLEY

The NEW

Cougar* ZD-4

COIN OPERATED POOL TABLE

The Best gets Better! with...

*ZERO DEFECTS

Zero Defects ... all value! Thats the new Valley Cougar ZD-4. It's the operators dream because every feature, every component is selected, tested and assembled to rigid inspection standards to be trouble free. More than ever, you can rely on Valley for quality and value. That's the Valley difference ... **Count on it!**

NEW FEATURES

- Redesigned coin chute housing
- All-plywood cabinet
- New compression spring counter arm
- New color – durable Classic Mahogany
- New heavy-duty coin mechanism

plus ...

The other "Tavern-Tested" features that keep Valley in first place.

From production through performance, Valley builds with the operator in mind. This is why "Valley Value" is **still** the **surest** thing in this fast-moving industry. That's the Valley difference ... **Count on it!**

THE VALLEY COMPANY
Subsidiary of Kidde, Inc.
KIDDE

P.O. Box 656, Bay City, MI 48707 • (517) 892-4536
Sales "Hot Line" (800) 248-2837 • TELEX NO. 234218

TAX TIPS

By Irving L. Blackman

Schedule C a red audit flag

If you haven't incorporated your business yet, here's another good reason to do so. You know that Schedule C you file every year as a sole proprietor? Well, it may say Schedule C on the top of the form, but as far as the IRS is concerned it spells A-U-D-I-T. That same form may be leading you straight into the jaws of the government's revenue-collecting machine. Here's why.

Over the years, in the IRS audit-selection process, in which the IRS decides what returns are likely to turn up irregularities and generate additional tax liability, Schedule C has become public enemy number one—especially if the Schedule C reports gross receipts of more than $100,000.

You may get serious about drawing up those articles of incorporation after considering these facts: 1.12 percent of incorporated businesses with gross receipts of less than $100,000 were audited in 1983. The audit chance for corporations does not increase dramatically until gross receipts reach $1 million. The audit breakdown for 1983 for unincorporated businesses filing Schedule C was:

Less than $25,000	1.43%
$25,000 to $100,000	2.56%
$100,000 or more	5.3 %

Why the difference in treatment between corporations and sole proprietors with the same amount of gross receipts? The IRS cynically assumes that unlike a corporation that must keep a formal set of books, an unincorporated entrepreneur routinely underreports his income.

Here's how the IRS auditor will try to catch you with your underreported-income pants down. First, he'll ask you how much income other than that reported on Schedule C you received and where it came from. Next, he adds up all deposits made to all your bank and investment accounts. Are you getting a little uneasy? Loosen your tie. Why? Because the auditor is about to slam you with unreported income using figures and the following formula:

Hypothetical example

Total deposits	$210,000
Minus Schedule C receipts	145,000
	65,000
Minus other reported income	15,000
	50,000
Minus loan proceeds received	10,000
Unreported income	$ 40,000

The answer you give to wriggle out of this embarrassing situation is simple—the excess deposits aren't unreported income, they're merely transfers from one account to another. And then you had better be prepared to document that explanation. Otherwise, you're looking at additional tax, interest, and penalties. So my word of advice to you Schedule C junkies out there who still refuse to incorporate is this: keep good bank records and don't make any deposits you can't account for if faced with an audit. •

Hiring spouse a tax bonanza

Where this shoe fits, you'll want to wear it. This tax-saving hint is for the thousands of unincorporated family businesses in which the husband and wife work together. You'll like the tax benefits.

Here's a typical case: A husband operates the business as a sole proprietorship, and his wife helps him. Either the wife is getting paid wages for her services or she isn't. If she is being paid, you owe no payroll taxes on her wages. On the other hand, if you are not paying her wages, start now.

Let's itemize the tax benefits:

1. The wages are not subject to Social Security taxes—either the withholding from the employee (wife) or the employer's (husband) matching share. (See IRS Circular E, Employer's Tax Guide, Publication 15.)

2. The wages are not subject to federal unemployment taxes.

3. The wages escape state unemployment taxes, except in New Hampshire, the only state I am aware of that subjects these wages to this tax.

4. The wife can put her earnings into an IRA, up to $2,000 per year.

5. If the business has a KEOGH plan, contributions can be made for the wife just like for any other employee.

The same benefits listed above apply to your minor children who work for your sole proprietorship.

One warning: Though the tax benefits are terrific, you can't pay your wife or kids for not working. The wages paid must be reasonable, the same amount you would pay someone else for the same work. Failure to heed this warning could not only burst your tax-benefit package as enumerated, but could subject you to interest and penalties. •

Stock redemption may cause trouble

If you are a shareholder of a closely held corporation who finds himself strapped for cash, think twice before

redeeming (selling back to the corporation) your nonvoting preferred stock to solve your financial problems. Unless some strict tests are met reducing your voting control in the corporation, the proceeds of the redemption will be taxed as ordinary income.

Suppose you and two other shareholders are founders of a closely held corporation. Each owns 18 percent of the common stock. The rest of the stock is owned by various members of your families and friends, none of whom owns more than two percent. There is also a class of nonvoting preferred stock owned in the same proportion as the common stock. What would happen if you redeemed your 18 percent of nonvoting preferred stock to meet your cash needs? A tax disaster. Here's why.

The Internal Revenue Code awards you capital-gain treatment for the profit on your sale of stock to the corporation if the redemption meets one of three tests:

1. It terminates your interest in the corporation completely.
2. It substantially reduces your voting power.
3. It is not essentially equivalent to a dividend.

The redemption of the nonvoting preferred stock fails to meet test one or two. After the redemption, you would still have an interest in the corporation and unchanged voting power. Will test three do the trick? No. Here's why.

A redemption is considered not essentially equivalent to a dividend if it results in a meaningful reduction of the shareholder's proportionate interest in the corporation. "What does that 'taxalese' mumbo-jumbo mean?" you're probably asking. The courts have said that in determining whether a meaningful reduction takes place and capital-gain treatment is allowable in a redemption, three elements should be considered. Those are a reduction in the shareholder's right to:

1. vote and exercise control over the corporation's affairs;
2. participate in current earnings and accumulated surplus of the corporation; and
3. share in the net assets of the corporation upon liquidation.

In this case, the proposed redemption certainly would reduce your percentage interest in the corporation's current earnings, accumulated surplus, and net assets upon liquidation. But your voting interest remained undiminished, and that sets the stage for a tax disaster.

"Wait a minute," you protest, "I have only a minority voting interest. That doesn't give me any right to direct the corporation's affairs. I'm not even related to the other two 18-percent shareholders. My voting interest shouldn't even be considered." Logic is on your side. But no dice, says the IRS.

Revenue Ruling 85-106, dealing with a similar situation, holds that a redemption that does not reduce a shareholder's ability to be part of a control group is not a meaningful reduction in the shareholder's interest in the corporation. Under these facts, your voting power could be combined with that of the other two 18-percent shareholders, enabling you to be part of a control group directing the operations and financial affairs of the corporation. Regardless of the reduction of your economic interest in the corporation, your failure to reduce your voting power means your interest in the corporation was not meaningfully reduced, and that nixes capital-gain treatment. •

Expired tax breaks may return

At the end of 1985 many tax breaks expired without being renewed by Congress, which is preoccupied with tax reform, the budget, and re-election. The House Ways and Means Committee, however, will soon begin drafting legislation to resurrect some of the expired provisions. Here is a list of some of the more popular old-friend breaks being given a chance at new life:

1. The exclusion of up to $5,000 for employer-provided educational assistance (employer pays employee's tuition)
2. The 25-percent tax credit for incremental research and development
3. The exclusion for benefits paid by an employer under a pre-paid legal-services plan (employer pays for employee's legal fees)
4. A host of residential and business energy credits (only those provided for in the recent House-passed tax-reform bill would be considered)
5. The targeted-jobs credit
6. The exclusion for van-pooling (employer provides transportation between employees' residences and the workplace)
7. The expensing of costs for removing architectural barriers to the handicapped

All of these provisions would have been extended under a House bill passed late last year but rejected by the Senate.

If Congress is true to form, the provisions that pass will be made retroactive to January 1, 1986. For example, the employer-provided tuition exclusion expired at the end of 1984, but was resurrected in spring 1985 and made retroactive to January 1, 1985. •

Irving L. Blackman is a CPA specializing in taxation and closely held businesses. A partner in the firm of Blackman, Kallick & Co., Ltd., he will consult with readers of his column. Write him at 300 South Riverside Plaza, Chicago, IL 60606, or call (312) 207-1040.

Advertising reaches more buyers in Play Meter

Aids to the Trade

Route-management software

Southland Associates of Belmont, Calif., has announced the availability of Easy! Route, a software package for amusement operators to computerize route organization, collection security, and administration.

Under development and field tested for more than three years, Easy! Route provides 15 reports that track locations and games, monitor collection and cash shortages, determine trends, and help with collection and rotation schedules.

Before a scheduled collection, the system prints a collection sheet for each location showing all games and the date of last collection, including meter readings. The system also prints pick-up and delivery sheets to document game movement.

Revenue, administrative, and security controls are built-in, as is a marketing data base that can help attract investors, bankers, and potential route buyers.

Priced at $1,295, Easy! Route includes all programs, a reference manual, and an introductory tutorial to help users learn the system. The system operates on most microcomputers, including the IBM PC and AT.

For more information, write Southland Associates, 501 Old County Road, Suite B, Belmont, CA 94002, or call (415) 592-2801.

Shuffleboard wax

Nu-Look Products has introduced Sure Shot Shuffleboard Wax, produced for the shuffleboard and shuffle-alley players who want extra "slip."

The shuffleboard wax has moisture-proof ingredients and comes in a recloseable container. Nu-Look Products is marketing the product and looking for distributors to handle all or part of its product line.

For more information, write Nu-Look Products, P.O. Box 4678, Hollywood, FL 33023, or call (305) 981-9330, 981-2255.

Electronic controls

The Veeder-Root Company has introduced timer and combination counter/timer versions of its Series 7915 electronic controls.

Each model is for use where automated machine or process control is based upon sequential time cycles or alternating counting and timing cycles.

The Series 7915 is compact and inexpensive. Automated control is based on a preset time duration in conjunction with a preset count of cycles, pieces, units of length, etc. Desired preset values can be programmed into the 7915's memory.

The 7915 controllers weigh 10.2 oz. and are housed in a plastic case that fits in a standard 50-millimeter-by-50-millimeter panel cutout. All standart models accept 115 Vac/230 Vac 50/60 Hz operating power. Solid-state CMOS circuitry is used for high reliability and immunity from the effects of electrical noise.

Front-panel push buttons permit simple entry and review of present count and time limits as well as process data. Counting models incorporate a prescaler factor that simplifies calibration of input signals to display the correct engineering unit.

For more information, write Veeder-Root Company, 70 Sargeant St., Hartford, CT 06102, (203) 527-7201. For application assistance, call toll-free 1-800-243-4458.

Gauntlet monitor shield

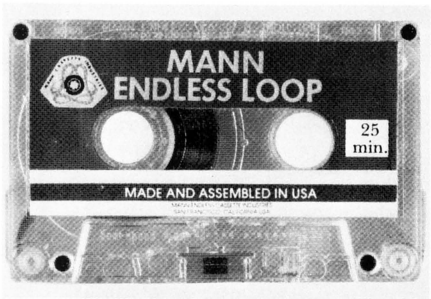
Atari Games Corp. is offering a monitor-shield kit for its *Gauntlet* video game.

The kit includes tinted plexiglas, sealant-foam tape, six screws, and spacers for mounting the shield on the existing leak-proof monitor bezel.

According to Peter Takaichi, Atari director of design services, the existing exposed monitor and bezel are "reasonably shatter-proof and watertight. Our safety tests have proved this beyond doubt."

Atari designed the monitor-shield kit in response to requests from operators concerned about vandalism in unsupervised locations. The kit is available from Atari distributors.

Aids to the Trade



Endless-loop cassette

Mann Endless Cassette Industries introduces a long-play endless-loop cassette that operates in standard cassette machines, including front-loading vertical-play as well as horizontal-play models.

The patented cassette automatically repeats recorded material without re-winding and is available with low-cost players modified to start and stop on cue.

Endless loops in one minute increments come in lengths of one through 25 minutes; other lengths can be special ordered. Mann endless loop casettes with heavy-duty tape have a life expectancy of up to 50,000 passes.

Current uses include talking displays, computer data storage, audio visuals, commercial messages, and telephone-answering machines. Cassettes are $5 each plus $1 for each minute of length. Quantity discounts are available.

For more information, write Mann Endless Cassette Industries, P.O. Box 1347, San Francisco, CA 94101, or call (415) 221-2000.

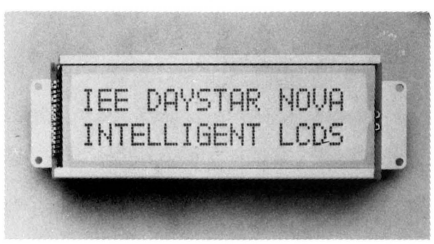
New IEE displays

The Industrial Products Division of IEE (Industrial Electronic Engineers) has introduced a compact two-line by 16-character format to its Daystar Nova line of 3803-series liquid crystal displays. IEE also has added a new high-resolution six-line by 40-character display to its FLIP family line of intelligent vacuum-fluorescent display modules.

Daystar Nova displays are alphanumeric modules that feature an operating-temperature range of from minus 30 degrees to 85 degree Celsius, making them ideal for outdoor applications. Low current requirements lend the display to battery-powered operation. Optional electroluminescent backlighting permits use even in complete darkness. Display characters are 9.1 millimeters high and can be read from up to 15 feet away.

The Flip family high-resolution six-line by 40-character display, model 28400-99, is for applications that require enhanced component reliability. The module uses MIL-qualified components and has an extended operating temperature range of minus 40 degrees to 85 degrees Celsius. It is 12.5 inches wide, 6.5 inches high, and 1.56 inches deep. Characters are 5.05 millimeters high in a five-dot by seven-dot matrix.

For more information, write IEE, Industrial Products Division, 7740 Lemona Ave., Van Nuys, CA 91405, or call (818) 787-0311.



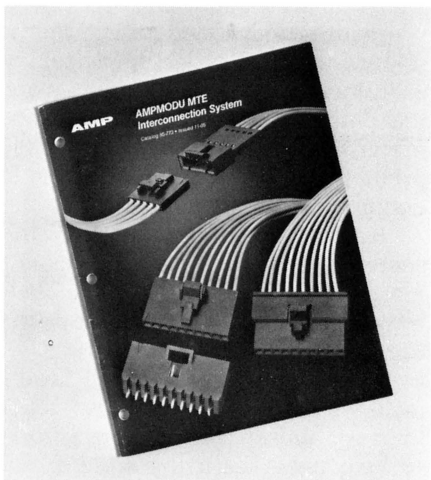
Floor sealer, roof system

Randustrial Corporation offers Piran Poly Sealer, a polyurethane floor sealer designed to protect wood and concrete floors from dirt and grime. One coat provides a wear-resistant finish that guards against spilled oil, grease, and chemicals.

The sealer dries in two hours, and one gallon covers approximately 300 square feet.

Randustrial also produces a do-it-yourself single-ply roof system made of a thermoplastic waterproofing compound sprayed under and over a heavyweight polyester fabric.

For more information on the floor sealer or roof system, write Randustrial Corporation, 13311 Union Ave., Cleveland, OH 44120, or call toll free 1-800-321-4662 (in Ohio 1-800-468-0576).



Interconnection system catalog

The latest additions to the AMP mass-terminated connector families are featured in a new 32-page catalog that describes the AMPMODU MTE Interconnection System. The system is characterizd by insulation displacement of both pin and receptacle contact. Electrical and mechanical specifications are provided for almost 300 different connectors, and the complete range of application equipment and hand tools is described.

For a copy of the catalog (#85-773), write AMP, Inc., P.O. Box 3608, Harrisburg, PA 17105, or call (717) 564-0100.

CLASSIFIED ADVERTISING

WANTED
USED PC BOARDS

CALL FOR QUOTES

ELDORADO
PRODUCTS, LTD.
14816 Main Street
Gardena, CA 90248
213/516-9525

LEGAL GALAGA for $199
A.P. Engineering converts Atari
Dig Dug P.C. boards into Galaga
24 hour turnaround
1917 Huntington Street, Suite 3
Huntington Beach, CA 92648
714/969-1243

Harry's Vending
Attention owners of the *Truth Quiz* by Status, *Hangman* 12000 puzzles most innovative trivia for $290. *Super Trivia* (12000 questions) also makes Status absolute best trivia for $280. Used Status Edition $75. New Status trivia countertops $1290. We also buy used Status *Trivia Quiz* countertops
P.V. Co.
New West Coast distributor for Status
(213) 378-8199

GAME AUCTION
Indianapolis, Indiana
Saturday, April 19
11:00 A.M. — 250 GAMES
GENERATIONS PAST
(formerly Big Red Barn)
Zionsville Exit 130 Off
Interstate 65 - 10 Miles
Northwest of Indianapolis
****
VIDEOS • PINBALLS
POOL TABLES • JUKEBOXES
****
Auctioneer: Bill Hughes
Ric Stephan, 812/332-0568
2415 West Amherst
Bloomington, IN 47401

LOUISE'S HARNESS SHOP
Rt. 3, Box 72
Prattville, AL 36067
Video Game Harness and Donkey Kong Monitor Conversion Kit
Prices start at $15.00
Write or Call
205/365-1841

KIDDIE RIDES
New & Rebuilt
We Buy, Sell & Trade
(309) 788-0135
Lowest Prices in Country

ADVERTISE IN PLAY METER

504/488-7003

CAREER OPPORTUNITY

The nation's foremost gaming authorities, a growing firm 25 miles east of Los Angeles, is seeking an entry level professional. Our clients include management/owners of amusement parks, California fairs/carnivals, law firms, card clubs, arcades and game manufacturers. We conduct seminars for law enforcement and universities and make presentations in courtrooms and to licensing boards.

Technical game skills will be taught, inhouse.

Responsibilities and Skills

20% Field Work • 30% Inhouse Marketing and Promotion of Our Services • 50% Writing Proposals, Technical Reports and Other Communications
This applicant must have a background of high integrity, related business experience; basic mechanical or electronic knowledge is desirable. Candidate must be extremely observant of details. You must deal effectively with representatives from the game industry and government. In essence, the successful applicant will be above average in accuracy and conscientiousness and be strongly motivated to produce. Send resume, salary information and a list of any written articles or papers, to:

BOB SNYDER AND ASSOCIATES, INC.
20505 Valley Blvd., Suite 107, Walnut, CA 91789
Interviews by appointment only.

FACO WEST

BEST NEW GAMES

Legend of Kage (fantastic earnings, 30-day trial) ..... Call
Alpha Mission (as constant as Galaga and 1942, a must for your route) ..... Call
Sandlot Baseball (as good as World Series or we'll buy it back in 45 days) $695
Battlelanes ..... Call
Dig Dug II (new from Namco — looks good) 595
Jailbreak ..... Call
Ring King (two-player) ..... Call

ALSO JUST IN

A new run of PAC-LAND — very consistent earnings
If you operate one you know what we mean.
$895.00

BEST BUYS

Yie Ar Kung Fu $395
Galaga III 395
Kicker 395
Music Trivia 495
Mag Max 445
Mat Mania ..... Special
1942 ..... $595
VS. 10 Yard Fight 395
Trivia Master 395
Crowns Golf 495
My Hero 495

STILL IN STOCK AND AVAILABLE

Choplifter ..... Call
Tiger Heli ..... Call
Terra Cresta ..... Call
Ring King I ..... Special
10 Yard Fight 395
Bank Panic 195
Donkey Kong III (P.C. board only) 125
Aria Batto 295
Hyper Sports 195
Karate Champ 395
Kick Start $245
Front Line 195
Elevator Action 295
Mario Bros. 195
Mikie 195
Pro Golf 195
Super Basketball 295
Samarai Warrior 295
Music Trivia 495
Trivia Master 395

SPRING CLEAR OUT

Rush 'N Attack $695
Samarai Warrior 295
Tank Buster 295
TNK III 495
Unisystem P.C. board with choice 495
Super Basketball 295
Road Fighter 395

OTHER SPECIALS

Seaburg Phonograph TMC — New in Carton — $1495 to $1995
Laser Players — New in Carton — $295, Used — $195
Sony 7 amp Power Supply — $32.95

10719 Burbank Boulevard • North Hollywood, CA 91608

818/508-7902

#1

FIRST . . .
IN QUALITY GAMES

FIRST . . .
IN QUALITY SERVICE

The Game Exchange

P.O. Box 09598
1289 ALUM CREEK DRIVE (our only office) COLUMBUS, OHIO 43209-0598 • 614/258-2933
CALL TOLL FREE
IN OHIO 1-800-848-1514
OUTSIDE OHIO 1-800-848-0110

Now Available

Karate Champ kits
$395.00

FACO WEST
10719 Burbank Boulevard
North Hollywood, CA 91601

818/507-7902

FRANK'S CRANKS

BEST IN USED VIDEOS

Crossbow	$ 995
Commando	1595
Excitebike	895
Hogan's Alley	995
Karate Champ	995
Kung Fu Master	1295
Paperboy	1995
Punch Out!!	795
Spy Hunter	1695
VS. Golf	895
Chexx	595
Gauntlet (Special)	2395
Super Basketball	495
Hat Trick	1495

Many Reconditioned Pinballs

(Tokens—All sizes)

NEW GAMES

Beat the Clock	call
Gauntlet	call
Hang-On	call
Ghosts 'n Gobblins	call
World Series	call
Rock (pinball)	call
Trivias	call
High Speed	call
Pop-A-Shot	$1995

MERCHANDISING EQUIPMENT

Splash Down	$4000
Big Dipper	2995
Penny Falls	2995
Handle slot machines	1295
Flipper	995
Big Choice Triple Crane	call
Low Boy Crane	call

CONVERSION KITS

1942	$ 725
Choplifter	825
Crowns Golf	595
Gun Smoke	call
Indiana Jones	call
Mat Mania	call
Rush 'N Attack	700
Sac-Man	call
SHANGHI KID	595
TNK #3	625
Terra Cresta	call
VS. UniSystem plus kit	call
Jail Break (Konami)	call
Section Z	call

Call us today
for complete list on all
new or reconditioned
videos and pinballs.

ALPHA-OMEGA-SALES
Call Marty, Joe, or Frank "The Crank"
201/287-4990

The Operator's First Choice
6 Sutton Place • Edison, NJ 08817

Video Connection

CONVERSION KITS

Ghost 'N Goblins (Romstar now a kit)Call
Legend of Kage (Taito, now a kit)... Call
Gunsmoke (Romstar shoot 'em up).. Call
Choplifter (helicopter hostage drama) Call
1942 (Romstar WWII fighter action!)..$675
UniSystem (for Pac-Man w/software) 595
My Hero (Sega, like Kung Fu Master) 575
TNK III (super tank closeout) 495
Shanghi Kid (hot martial arts) 495
Yie Ar Kung Fu* (top kit '85) 475
Magmax (transformers robots) 449
Kicker (F.K.* Stern)) 425
10 yard Fight II (F.K.* Williams) Closeout
Cruisin' (hot driving game!) 495
Williams Inferno (2-player action) .. 449
Super Basketball** (sports action) .. 299
Empire Strikes Back (for Star Wars) . 275
Universal (2-player indoor soccer) ... 249
Exidy Faxs II (trivia kit) 249
Do! Run Run (best of Mr. Do!)..... 225
Williams Sinister Kit (hot)..... 175
FREE Nova 2001 or Atomic Boy with any 4 kits

LASER KIT CLOSEOUTS

Cobra Command..... make offer
Super Don Quixote ..... make offer
Galaxy Ranger ..... make offer

*F.K. (fast kit) includes:
P.C. Board and control panel
pre-wired for fast plug in.
**These are trademarks of Konami®.

VIDEO CONNECTION
930 Jeffrey Lane, Dixon, CA 95620
916/678-5189

WANTED

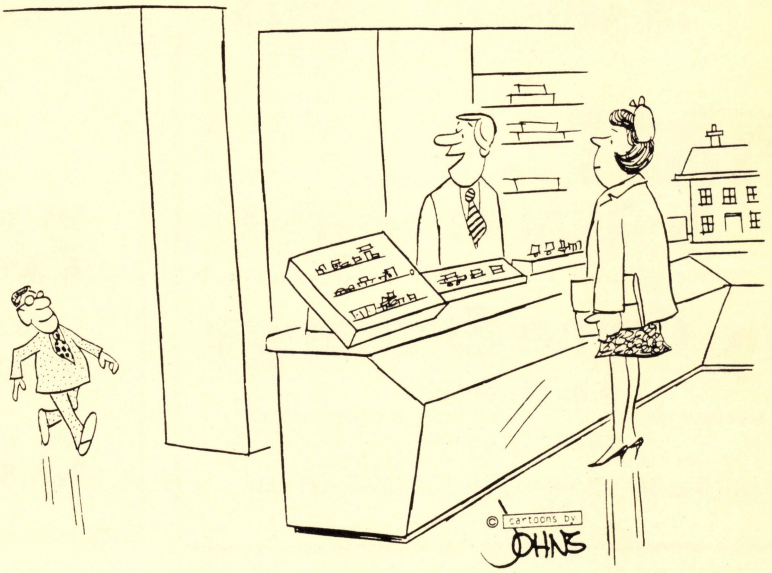
Philadelphia *Skee-Balls*, Model H with ticket dispenser, *Whac-A-Mole* $1 & $5 changer by Rowe, *Marble Madness*, *Hat Trick*, *Buggy Challenger* (sitdown), *TX-1* (sitdown), *Spy Hunter* (sitdown)
For Sale: *Triple Crane*
Wanted: Namco *Shoot Away*

M & P AMUSEMENT CO.
717/848-1846

PHOTO MACHINES

WE BUY AND SELL
CHEMICALS, FILM, PARTS
BEST PRICES GUARANTEED
OVER NIGHT SERVICE IS YOURS WHEN NEEDED.
...sent today, delivered tomorrow™

ED HANNA
P.O. Box 290777 • Davie, Florida 33329
305/474-5888
Established 1951



"I'LL LET YOU TALK WITH OUR MAN IN CHARGE OF MINIATURES....OH, HERE HE COMES NOW"

PAYPHONES—$69

As extensions. Or ready to profit from $295. Genuinely F.C.C. registered! Or. an economical model $164. Zero & info. options for free or 25¢. Free 911, timed calls. Built like a tank.
608/582-4124 or 2368 Anytime.

WANTED

ARCADES, GAME ROOMS,
MINI-AMUSEMENT CENTERS,
MALL FAMILY AMUSEMENT CENTERS
Aggressive, experienced arcade company is looking to expand operations anywhere in U.S.A. Contact:
GENERAL AMUSEMENT
5400 W. Cullom, Chicago, IL 60641
312/281-8211

COIN & TOKEN WRAPPERS

Contact for Samples/Prices
ARMSTRONG SERVICE
10414 Stone Court
Cincinnati, OH 45242
513/891-4055

Harry's Vending — STATUS SALE
For five orders: $1,050 per new countertop, $240 per Hangman chip, and $240 per Super Trivia Chip.
P.V. Co. • (213) 3778-8199

PLAY METER CLASSIFIED ADVERTISING

Play Meter's classified ads are sold by inch ($30 per column inch with a 1 inch minimum). Prepayment must accompany ad. You may pay by check, money order, Visa or Master Card. Deadline schedules are available upon request. Send ad orders and prepay-ment to: *Play Meter* Magazine, P.O. Box 24970, New Orleans, LA 70184. For more information, contact Joe VonderHaar 504/488-7003.

Write in or attach ad copy

_____

_____

_____

_____

_____

_____

Company Name _____

Name _____

Address _____ Phone _____

City _____ State ____ Zip _____ Total Enclosed _____

Visa Acct. No. _____ Expiration Date: _____

Master Card Acct. No. _____ No. of issues _____

Authorized Signature _____

THE LOTTERY

$10 BILLION

$10 BILLION

ASTROPICK

Over 25,000 lottery terminal outlets in 23 states - hundreds of thousands of additional potential locations.

Available adapted for any state or foreign lottery.

Selects 3-digit, 4-digit and lotto numbers at random, or based on user's lucky day input.

Generates printed ticket.

Bright, animated tv color graphics during attract and operation modes.

Whimsical attract and operation modes features lively music.

Durable, sturdy steel cabinet. Reliable, low maintenance components. Attractive, decaled graphics.

For more information, write or call

ASTROPICK©
P.O. Box 5013
Cherry Hill, N.J. 08034
(609) 665-7577
Ralph Anastasio or Joe Gould

Dealer/distributor inquiries invited.

THANKS FOR MAKING OUR BOOTH AT **ACME '86** AN OUTSTANDING SUCCESS!

GET YOUR SHARE OF AMERICA'S NEWEST, FASTEST GROWING MULTI-BILLION DOLLAR INDUSTRY!

Data East gives your profits more punch with the first knockout 2-player kit!

RING KING is an exciting, action-packed, interactive 2-player game in which 2 players challenge each other to a Championship Boxing Match.

Player 1 or Player 2 can win the match and become the Title Holder by either scoring a Knock-Out or by winning the rounds on points.

The Boxers and the Challengers in both the 1-player and 2-player games are from around the globe, and each has his own style of boxing. Each boxer is armed with an assortment of jabs, hooks, uppercuts, and combinations along with his ability to Float like a Butterfly and Sting like a Bee.

As you already know from Karate Champ,™ with a Data East 2-player game you get double the coins, plus fantastic longevity.

See your local Data East Distributor or contact Data East USA, Inc., 470 Needles Drive, San Jose, CA 95112. (408) 286-7074.

DATA EAST

© 1985 DATA EAST USA, INC.